Qsee®
simplicity - quality - technology

User Manual

H.264 NETWORK DVR

QS Series

Thank You for Choosing a Q-See Product!

All of our products are backed by a conditional service warranty covering all hardware for 12 months from the date of purchase. Additionally, our products also come with a free exchange policy that covers all manufacturing defects for one month from the date of purchase. Permanent upgrading service is provided for the software and is available at www.Q-See.com.

Be certain to make the most of your warranty by completing the registration form online. In addition to warranty and technical support benefits, you'll receive notifications of product updates along with free downloadable firmware updates for your DVR. Register today at www.Q-See.com!

Please see the back of this manual for exclusions.

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Manufacturer shall not be liable for any damages whatsoever from misuse of this product.

About this Manual

This manual is written for the QS206 DVR and was accurate at the time it was completed. However, because of our ongoing effort to constantly improve our products, additional features and functions may have been added since that time and on-screen displays may change. We encourage you to visit our website at www.Q-see.com to check for the latest firmware updates and product announcements.

Throughout the manual we have highlighted warnings and other important information that will assist you in operating your new system in a safe and trouble-free manner. Please take the time to read and follow all instructions and pay attention to alerts as shown below:

IMPORTANT! Red boxes with this icon indicate warnings. To prevent possible injury or damage to the product, read all warnings before use.

NOTE! Text in blue boxes with the Information icon offer additional guidance and explanations about how to make the most out of your system.

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INTRODUCTION

CHAPTER 1

To prevent damage to your Q-See product or injury to yourself or to others, read and understand the following safety precautions in their entirety before installing or using this equipment. Keep these safety instructions where all those who use the product will read them.

WARNING! ELECTRIC SHOCK RISK!

- Check the unit and any accessories included in the package immediately after opening. If items are missing or damaged, repackage and return to the point of purchase.
- Use the proper power source. Only use the power adapter supplied with your system. Do not use this product with a power source that applies more than the specified voltage (100-240V AC).
- Never insert anything metallic into the DVR. Inserting anything into the DVR or its case can be a source of dangerous electric shock.
- Do not operate in dusty areas.
- Do not expose this product to rain or use near water. If this product accidentally gets wet, unplug it and contact an authorized dealer immediately.
- Keep product surfaces clean and dry. To clean the outside case of the DVR, gently wipe using a lightly dampened cloth (only use water, do not use solvents).
- Do not operate this DVR without the cover securely in place. Do not attempt to do any repairs to the DVR yourself. If there are unusual sounds or smells coming from the DVR, unplug it immediately and contact Q-See technical support. Under no circumstances should the cover be removed while the device is connected to a power source. You should only remove the cover to install/replace the hard disk drive (**See Chapter 8**) or replace the standard 3v lithium cell battery on the motherboard. These are the only user serviceable parts. You may need to replace the battery if the internal clock resets itself after a power outage
- Handle DVR box carefully. If you accidentally drop your DVR on any hard surface, it may cause a malfunction. If the DVR doesn't work properly due to physical damage, contact an authorized dealer for repair or exchange.
- Make sure there is proper air circulation around the unit. This DVR system uses a hard drive for video storage which generates heat during operation. Do not block air holes located on the bottom, top, sides and back of the DVR as they are designed to keep the system cool while running. Install or place this product in an area where there is ample air circulation.
- Provide proper ventilation. This DVR has a built-in fan that properly ventilates the system. Do not cover or impede this fan.

FEATURES AND SPECIFICATIONS

This product offers the following features:

Smartphone Compatible

Access live footage directly from your iPhone, iPad or smartphones running Windows Mobiel, Android, Symbian or BlackBerry operating systems. Your DVR can also be set to e-mail your hand held-device whenever specific activity occurs, such as motion detection.

View Your Video Feed Online with No Extra Service Fees

View your DVR's live or recorded video footage on any Internet accessible computer with Internet Explorer, Mozilla Firefox and Google Chrome (using IE plug-in).

Stay Notified with Customizable Email Alerts

Set your system up to notify you when an event has occurred at the location you are monitoring. Notification alerts can easily be adjusted to your specifications.

Advanced Motion Detection Activated Recording

Advanced motion detection settings ensure that false alarms are not triggered. The easy to use motion detect set up screen allows you to mask out certain areas which experience heavy movement in order to avoid false alarms and avoid unnecessary record triggering.

Multiple Backup Options

A built-in USB port gives you the option of backing up and transferring your video footage using a flash drive or external USB hard drive. You can also connect to an external CD/DVD writer to burn your file footage right onto a compact disc or DVD disc. Files can also be accessed from your DVR system to a remote computer location by logging on remotely.

Connect to a TV or PC Monitor Easily

This system comes with both a VGA and BNC out port to allow you to connect to a TV or computer monitor for viewing purposes.

User-Friendly LCD Control Functions

Front panel button control allows instant booting up and system standby at the press of a button. LCD monitor can be set to go into energy efficient stand-by mode.

Included Mouse and Remote Control

In addition to front panel button controls, system can also be booted up and system standby using the included remote control or mouse. Mouse operation function supports intelligent operation by enabling copy and paste functions.

Storage Function

Encrypted file format to ensure data security and avoid vicious data modification.

Compression Format

Supports multiple-channel audio and video. Independent hardware decodes the audio and video signal from each channel to maintain video and audio synchronization.

Audio Recording

Two channels include audio as well as video input.

24/7 Scheduled Recording

Choose which days of the week and hours of the day you want to set your DVR to record or not record.

Multiple Playback Options and Advanced Search Functions

Supports real-time recording on each channel independently. Search through recorded files while you are playing live footage, monitoring through a remote location using a supported internet browsing application and backing up system files. A variety of playback modes include: slow play, fast play, backward play and frame by frame play.

Network Monitoring

Supports network remote real-time monitoring (available bandwidth permitting), remote record search and remote PTZ control.

Alarm Activation Function

Several relay alarm outputs enable you to pair your system with an on-site alarm system.

Communication Ports

- RS485 port can be used for PTZ camera control.
- RS232 port can connect to a keyboard for central control, and can also connect to PC COM to upgrade system and maintain system settings.
- Standard Ethernet port allows you to access the DVR from a network or the Internet.

PTZ camera control

- Supports PTZ decoder via RS485.
- Supports a variety of protocols to allow the DVR to control the PTZ speed dome: AD1641M, Admatrix, Banknote, DH-CC440, DH-Matrix, DH-SDI, Dh-SD2, Eptz, General, Haiyu, Hy, Lilin, Mercer-1, Panasonic, PE5051K, Pelco-9750, PelcoASCII, PelcoD, Pelcod-DON, PelcoD-S, Pelco-SI, Pelco-T, PelcoD1, PelcoD1-T, PelcoP, PelcoP-HK, PelcoP1, PelcoP5, Philips, Pih-717, QT-2XXD, Rm110a, Sae, Samsung, Sanli, Santachi, Sharp, Sony, WV-CS850I, WV-CS850II, WV-CS950, Yaan

NOTE! Depending on your point of purchase, your DVR may have the hard disk drive already installed. If your drive was packaged separately, or if you wish to upgrade your installed drive up to a 2TB drive, please see Chapter 10 at the back of this manual which covers installing the drive.

INSTALLATION AND CONNECTION

CHAPTER 2

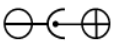
Please note that it is important to keep in mind common safety guidelines when installing your DVR or connecting additional devices – including turning off and unplugging your DVR before installing internal components.

QS206

PICTURE 2-1

Item #	Name/ Symbol	Description	
1	STANDBY	Press to set the system in standby mode.	
2	MENU/EXIT	Press to open/close the main menu.	
3	CHANNEL/ NUMBERS/ PLAYBACK	Press buttons 1-8 to view the selected channel full-screen; press buttons 1-0 to input passwords and user IDs.	
4	NAVIGATION/ OK	OK	In menus, press to confirm selections; in PTZ mode, press to change the navigation buttons to control a connected PTZ camera (not included)
		▲	Press to move cursor up; in PTZ mode, press to pan camera up.
		▼	Press to move cursor down; in PTZ mode, press to pan camera down.
		◀	Press to move cursor left; in PTZ mode, press to pan camera left.
		▶	Press to move cursor right; in PTZ mode, press to pan camera right.
5	LED INDICATORS	Shows status of hard drive, recording, alarm, HDD full and network.	
6	DURING PLAYBACK PRESS:	◀◀	Increase reverse playback speed 1X, 2X, 4X.
		■/▶	Press to freeze playback to one frame, then press again to advance frame-by-frame.
		▶	Press to start playback
		▶▶|	Press to slow playback speed by 1/2, 1/4, 1/8.
		▶▶	Press to increase forward playback speed 1X, 2X, 4X.
7	IR SENSOR	IR Receiver for remote control.	
8		USB	Connect a USB flash drive for data backup and firmware upgrades

PICTURE 2-2

Item #	Physical Connector	Description
1	VIDEO IN	Video input for connecting analog video signal input (BNC)
2		DC 12V/3A Power Connection
3	VGA OUTPUT	To connect to VGA monitor
4	NETWORK	For connecting Ethernet cable
5	USB	Mouse port
6	ALARM INPUT	8 I/O Alarm input
	ALARM OUTPUT	I/O Output for alarm
	RS485	RS485 for connecting PTZ
	RS232	Debugging port
	+12V	Power supply for DC relay, the current is 100MA (to prevent short circuits)
7	AUDIO IN	Audio input for connecting audio signal (2 feeds)
8	AUDIO OUTPUT	For connection to amplified speaker
9	VIDEO OUT	Video output for connecting TV (BNC)

IMPORTANT! The default resolution of this DVR is 1024 x 768 pixels. Some monitors smaller than 19" may not display video properly.

Power

The DVR's power supply plugs into the socket marked DC 12V next to power switch (**Item number 2 in Picture 2-2**). It is absolutely essential that you only use the power supply that came with the DVR to ensure proper operation and to avoid damage.

We also recommend that you use an uninterrupted power supply (UPS) so that the system will continue to operate in the event of a power loss. In addition, you should connect the DVR into a UL-1449 rated surge protector. It should have a joule rating of at least 400, a response time of 10 nanoseconds or less and a clamping voltage of no more than 330 volts.

Mouse

The included USB mouse will only operate if connected to the DVR through the USB port on the rear of the DVR (**Item number 5 in Picture 2-2**). The USB port on the front of the DVR's screen is only for external USB storage devices.

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Item #	Name/ Symbol	Description	
1	STANDBY	Press to set the system in standby mode.	
2	IR SENSOR	IR Receiver for remote control.	
3	LED Inicators	Shows status of hard drive, recording, alarm, HDD full and network.	
4	CHANNEL/ NUMBERS/ PLAYBACK	Press buttons 1-8 to view the selected channel full-screen; press buttons 1-0 to input passwords and user IDs.	
5	MENU/EXIT	Press to open/close the main menu.	
4	NAVIGATION/ OK	OK	In menus, press to confirm selections; in PTZ mode, press to change the navigation buttons to control a connected PTZ camera (not included)
		▲	Press to move cursor up; in PTZ mode, press to pan camera up.
		▼	Press to move cursor down; in PTZ mode, press to pan camera down.
		◀	Press to move cursor left; in PTZ mode, press to pan camera left.
		▶	Press to move cursor right; in PTZ mode, press to pan camera right.
8		USB	Connect a USB flash drive for data backup and firmware upgrades
6	DURING PLAYBACK PRESS:	◀◀	Increase reverse playback speed 1X, 2X, 4X.
		■/▶	Press to freeze playback to one frame, then press again to advance frame-by-frame.
		▶	Press to start playback
		▶▶|	Press to slow playback speed by 1/2, 1/4, 1/8.
		▶▶	Press to increase forward playback speed 1X, 2X, 4X.

Item #	Physical Connector	Description
1	⊖⊂⊕	DC 12V/3A Power Connection
2	VIDEO OUT	Video output for connecting TV (BNC)
3	VIDEO IN	Video input for connecting analog video signal input (BNC)
4	AUDIO IN	Audio input for connecting audio signal (2 feeds)
5	ALARM INPUT	8 I/O Alarm input
	ALARM OUTPUT	I/O Output for alarm
	RS485	RS485 for connecting PTZ
	RS232	Debugging port
	+12V	Power supply for DC relay, the current is 100MA (to prevent short circuits)
6	NETWORK	For connecting Ethernet cable
7	VGA OUTPUT	To connect to VGA monitor
8	AUDIO OUTPUT	For connection to amplified speaker
9	USB	Mouse port
10	Power Switch	Power On/Off

IMPORTANT! The default resolution of this DVR is 1024 x 768 pixels. Some monitors smaller than 19" may not display video properly.

CONTROLS

This DVR can be controlled through the USB mouse, the remote control or by using the buttons on the front of the device. For the purposes of this manual, instructions will be given for using the mouse but the other modes are also presented in this chapter.

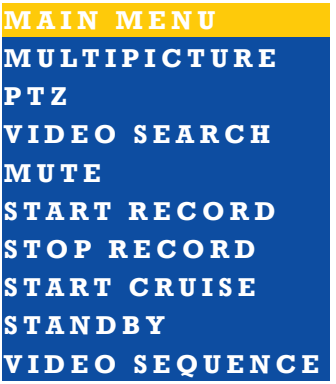
3.1 MOUSE CONTROL

The mouse operates in a manner similar to how it is used on a conventional computer; point-and-click, right-click, double click and so on. How these functions are used is based on the context of where they are used. Some examples are:

LEFT CLICK:
- Selecting an item
- Opening a menu
- Checking a box or motion detection status
- Selecting letters, numbers or symbols on the virtual keyboard.

DOUBLE CLICK:
- Selecting an event for playback
- Selecting a screen to zoom into from multi-screen mode

RIGHT CLICK
- Exits any window. Exits any menu or reopens previous menu.
- Opens **Pop-Up Shortcut** Menu



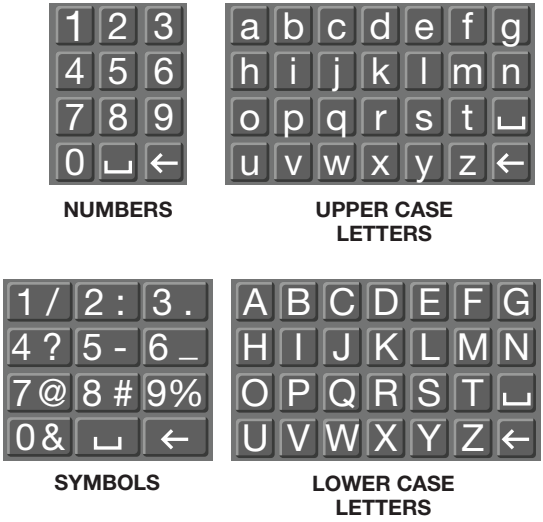
PICTURE 3-1

CLICK-AND-DRAG
- Select motion detection zone
- Select privacy mask zone

VIRTUAL KEYBOARD

The virtual keyboard is contextual. For example, it will only show digits when the field is for numeral entries. In fields where letters and symbols can be entered, users can switch between various formats – numbers, upper case, lower case and symbols – by selecting the white keyboard symbol that will appear to the right of a field where text can be entered. The symbol itself will change to show which keyboard format is available next.

Available keyboards include:


1 2 3
4 5 6
7 8 9
0 ␣ ←
NUMBERS
a b c d e f g
h i j k l m n
o p q r s t ␣
u v w x y z ←
UPPER CASE LETTERS
1 / 2 : 3 .
4 ? 5 - 6 _
7 @ 8 # 9 %
0 & ␣ ←
SYMBOLS
A B C D E F G
H I J K L M N
O P Q R S T ␣
U V W X Y Z ←
LOWER CASE LETTERS

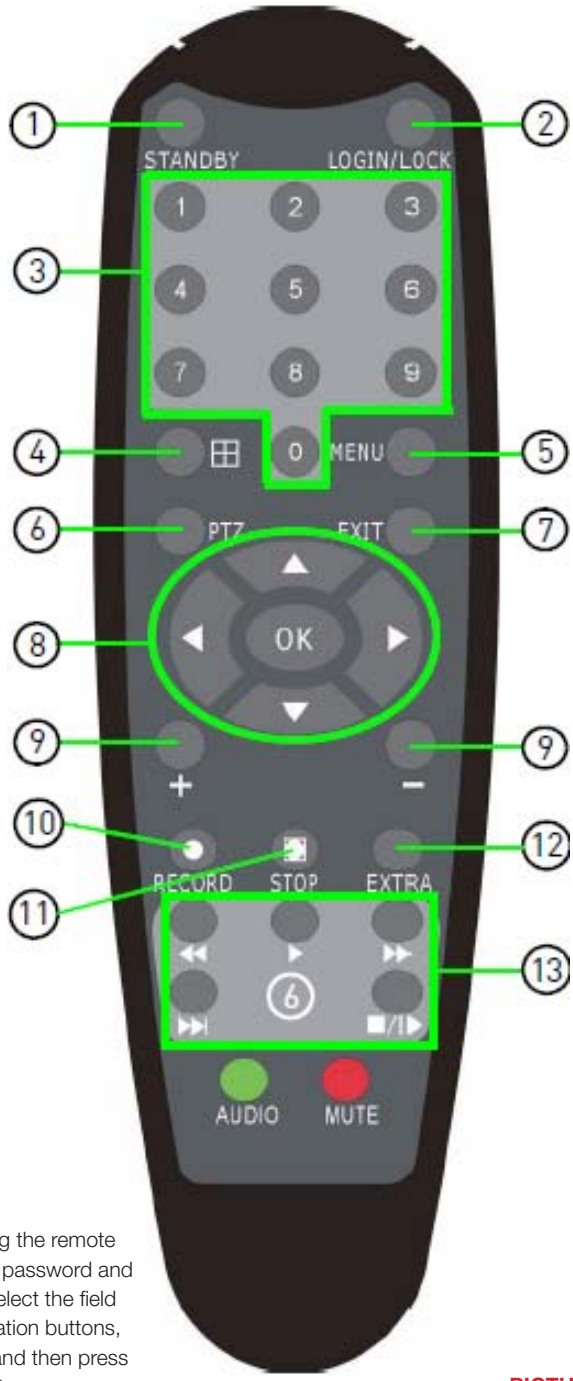
PICTURE 3-2

The keyboards are used by clicking on the desired character. Spaces are entered using the ␣ symbol and characters are deleted with the ← key. Clicking outside of the keyboard will close it.

3.2 REMOTE CONTROL

The buttons on the Remote Control operate in the same manner as on a conventional DVR remote. Some buttons have multiple functions depending on which menu is being accessed.

#	Name/Symbol	Function
1	STANDBY	Press to turn standby mode ON/OFF.
2	LOGIN/LOCK	If “Security” has been enabled in the Setup menu, press to open the user password login screen.
3	Number/Channel buttons	While in menus, press buttons 0~9 to enter values; during live viewing, press to view channels full-screen.
4		Press to switch between quad and full-screen displays.
5	MENU	Opens the main menu.
6	PTZ	Press to open the PTZ control window.
7	EXIT	Close menu windows.
8	Navigation/OK:	
	▲/CH+	Move cursor in menus up; Channel Up.
	▶/FWD	Move cursor in menus to the right
	◀/REW	Move cursor in menus left
	▼/CH-	Move cursor in menus down; Channel down.
	OK	In menus, press to confirm selections; during playback and preview, press to view system information
9	+/ - : In menus, press to adjust values.	
10	RECORD: Press to start manual recording.	
11	STOP: Press to stop manual recording.	
12	EXTRA: For future use.	
13	Playback controls:	
	◀◀	Increase reverse playback speed 2X, 4X, 8X
	▶	Press to start playback
	▶▶	Press to increase forward playback speed 2X, 4X, 8X
	▶▶|	Press to slow playback speed by 1/2, 1/4, 1/8
	|▶	Press to freeze playback to one frame, then press again to advance frame-by-frame



TIP: When using the remote control to enter password and camera titles, select the field using the navigation buttons, press ENTER, and then press the number buttons.

PICTURE 3-3

BASIC OPERATION CHAPTER 4

This chapter is intended to help you get your DVR up and running before you activate any advanced features which are covered in later chapters. You can use the mouse, remote control and the buttons on the front of the DVR to operate your system, but for convenience, we will be discussing operations using the mouse.

4.1 POWER ON/OFF

Connect the power cable to the DC 12V port on the rear panel. At startup, the system performs a basic system check and runs an initial loading sequence. After a few moments, the system loads a live display view.

STANDBY MODE

The system can be put into Standby Mode. Power will remain to the system but will not be recording.

To Start/Stop Standby Mode:

Press and hold the **POWER** button on the front panel or remote control until the prompt closes. The system enters standby mode.

Press and hold the **POWER** button on the front panel or remote control until the system beeps. The system will begin powering up.

Select "**Standby**" in the pop-up **Shortcut** menu (described in the next section)

SHUTDOWN

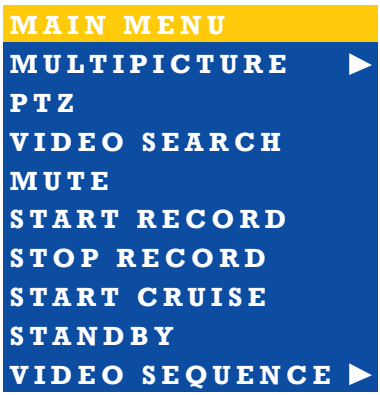
When the DVR will not be in use for an extended period of time, it is recommended that you shut it down completely. To do so, follow the above instructions to put the DVR into Standby mode. Once the DVR has gone into hibernation disconnect it from its power source. Turning off the surge protector that it is plugged into is the preferred method.

4.2 SHORTCUT MENU

The Shortcut menu gives direct access to many of the system's functions, features and options without having to go through a series of intermediiate steps.

Right-clicking with the mouse anywhere on the screen will bring up the **Shortcut** menu.

MAIN MENU: Opens the main system menu
MULTIPICTURE: Choose multi-screen mode
PTZ: Opens the PTZ control menu
VIDEO SEARCH: Open the Search Menu to view recorded video
MUTE: Mute listen-in audio on the system
START RECORD: Start manual recording
STOP RECORD: Stop manual recording
START CRUISE: Activates preset PTZ cruise
STANDBY: Click to go into standby mode
ROTATION: Start full screen cycle through channels



PICTURE 4-1

To close the **Shortcut** menu, click anywhere on screen.

4.3 SYSTEM LOGIN

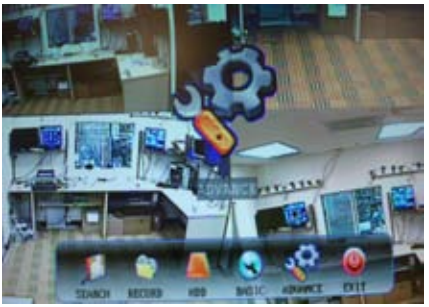
By default, passwords are disabled on the system. You do not need to enter a password when accessing any system menus. The default user name is ***admin*** and the password is blank (no password). Just click **Apply** However, for security purposes, it is highly recommended to enable passwords on the system using the **Password** menu.

PICTURE 4-2

4.4 MAIN MENU

To access the **Main Menu**, right-click anywhere onscreen with the mouse to open the **Short-cut** menu and select **MAIN MENU**. Pressing the **Menu** or **MENU/EXIT** button on the remote control or front panel of the DVRm, respectively, will also open the **Main Menu**.

Placing the mouse over an icon will display iinformation about its contents and/or function.



PICTURE 4-3

Symbol	Name	Function
	SEARCH	Search for recorded video on the system.
	RECORD	Configure recording parameters (quality, resolution), set record modes, and enable/disable audio recording.*
	HDD	Display hard drive status and format the internal hard drive of the system.
	BASIC	Open the Basic Setup Menu, which lets you set the system language, date and time, Device IDs and passwords, and configure audio and video settings.
	ADVANCE	Opens the Advanced Setup Menu, which lets you view system info, configure alarm, PTZ, mobile, and network settings.
	EXIT	Closes the Main Menu.

**Audio capable cameras or powered microphones (not included) are required for audio recording on the system.*

4.5 BASIC SETTINGS

Set the system language, date and time, passwords, and configure audio and display options.

The Basic Setup menu contains the following submenus: **Language**, **Date/Time**, **Password**, **Display**, and **Video/Audio**.

PICTURE 4-4

LANGUAGE

English is the only language available at this time.

PICTURE 4-5

IMPORTANT! After changing the Video Format, the device will need to be restarted.

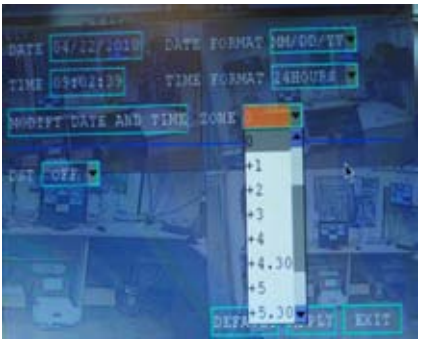
DATE/TIME

IMPORTANT! Date and time should be properly set before continuing so that you can easily locate recorded events. Inaccurate dates and times on files may affect their admissibility as evidence.

To set the date and time:

STEP 1. Click **DATE/TIME** and configure the following options:

- **DATE**: Enter the day, month, and year.
- **DATE FORMAT**: Select DD/MM/YYYY, MM/DD/YYYY, or YYYY/MM/DD
- TIME: Enter the time
- **TIME FORMAT**: Use the drop-down menu and select 12 HOURS or 24 HOURS
- **DST**: Use the drop-down menu to select **ON/OFF** to enable/disable Daylight Savings Time



PICTURE 4-6

- **ZONE**: Select the correct time zone based on your current location. If you are uncertain of your time zone, you can find it at ***http://www.worldtimezone.com***

STEP 2. Click **MODIFY DATE AND TIME**. Click **CLOSE** in the confirmation window.

STEP 3. Click **APPLY**. The new date and time are saved.

Daylight Savings Time

To set daylight savings time:

STEP 1. Under DST, select ON. DST options appear.

STEP 2. Under DST MODE select one of the following:

- **CUSTOM**: Set customized start and end times for DST (go to step 4)
- **DEFAULT**: The Default setting will apply DST from the second Sunday of March to the second Sunday in November (**Go to step 3**)
- If using the DEFAULT, click APPLY.
- If setting a CUSTOM DST, use the drop-down menus to select a week and month for the start and end times.

STEP 3. Click APPLY. Click CLOSE in the confirmation window.

STEP 4. Click EXIT in each menu until all windows are closed. Type date via numeric key.

PASSWORD

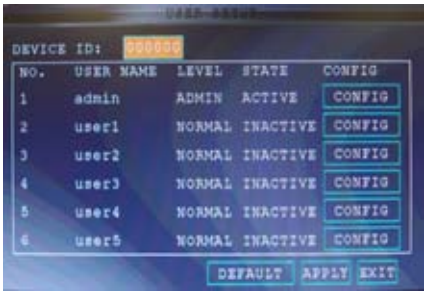
When you first startup your system, you are automatically logged in as the ADMIN under Device ID000000. By default, passwords are disabled on the system. You will not need a password to log in or access menus. You will not need a password to access your system using the browser-based remote software.

The system employs two levels of user authorities connected to a Device ID. The authorities are as follows:

- **ADMIN** (administrator): Has full control of the system, and can change both administrator and user passwords and enable/disable password checking
- **USER** (normal user): Only has access to live viewing, search, playback, and other limited authorities.

For security reasons, it is highly recommended to enable passwords on your system. If you enable passwords, you must select a 6-digit ADMIN password and a 6-digit USER password.

You can change the Device ID and password of the ADMIN and the USER from the **Password** menu.


DEVICE ID: 000000
NO. USER NAME LEVEL STATE CONFIG
1 admin ADMIN ACTIVE CONFIG
2 user1 NORMAL INACTIVE CONFIG
3 user2 NORMAL INACTIVE CONFIG
4 user3 NORMAL INACTIVE CONFIG
5 user4 NORMAL INACTIVE CONFIG
6 user5 NORMAL INACTIVE CONFIG
DEFAULT APPLY EXIT

PICTURE 4-6

To open the **Password/Security** menu, click on **Basic** in the **Main Menu** and then select **Password**.

To change your Device ID and Password:

STEP 1. Click the field beside **Device ID** and enter a 6-digit numerical Device ID using the Virtual Keyboard. *For example:* changing the ID to 000010.

STEP 2. Under **Password**, select ENABLE.

STEP 3. Click the field beside **Admin Password** to enter a 6-digit numerical password using the Virtual Keyboard. Re-enter the password in the corresponding field.

STEP 4. Click the field beside **User Password** to enter a 6-digit numerical password using the Virtual Keyboard. Re-enter the password in the corresponding field.

The ADMIN and USER passwords must not be the same.

STEP 5. Click **Apply** to save your changes. Click **Close** in the confirmation window.

STEP 6. Click **Exit** in each menu until all windows are closed.

PICTURE 4-7

PICTURE 4-8

DISPLAY

Use the Display Setup menu to customize channel titles, show/hide the date and time in live viewing and playback, and enable/disable preview channels.

To customize Display settings:

STEP 1. Configure the following options:

- **NAME**: Click any of the fields and enter a new title for the selected channel using the Virtual Keyboard (mouse only)
- **POSITION**: Reposition the channel title; select **TOPLEFT**, **BOTTOMLEFT**, **TOPRIGHT**, **BOTTOMRIGHT**, or **OFF**. If OFF, the title will not be displayed for the selected channel

PICTURE 4-9

- **COLOR**: Adjust **CHROMATICITY**, LUMINOSITY, **CONTRAST**, and **SATURATION** for the selected channel
- **PREVIEW TIME**: Select **ON/OFF** to show/ hide the date and time during live viewing
- **RECORD TIME**: Select ON/OFF to show/hide the date and time during playback.

STEP 2. Click **NEXT PAGE** to change the settings for the remaining channels (8 and 16-channel models only).

STEP 3. Click **APPLY** to save your settings. Click **CLOSE** in the confirmation window.

Preview

Preview channels can be very useful if your display monitor is in public view. Select **OFF** for preview channel and it will appear black on the display to give the impression that no cameras are connected and the system is not recording.

To enable/disable preview channels:

STEP 1. Choose a channel you wish to conceal. For example, channel 3. Under **PREVIEW**, select **OFF**.

STEP 2. Click **APPLY**. Channel 3 will turn black. Click CLOSE in the confirmation window.

STEP 3. Click **EXIT** in all menus until all windows are closed.

VIDEO/AUDIO

Use the Video/Audio menu to set the resolution and camera video system on the DVR.

To configure video options:

STEP 1. Under **VGA RESOLUTION**, select 800x600 or 1024x768.

STEP 2. Under **CAMERA SYSTEM**, select NTSC (North and most of South America) or PAL (Brazil and Europe).

STEP 3. Click **APPLY**. Click **CLOSE** in the confirmation window.

STEP 4. Click **EXIT** in all menus until all windows are closed.

PICTURE 4-10

To configure audio options (*only available on Channels 1 and 2*):

STEP 1. From the Video/Audio menu, click **VOLUME SETUP**. A split-screen display view appears.

STEP 1. Click any channel and adjust the slider to increase/decrease the volume for listen-in audio.

STEP 1. Click **X** to return to the Video/Audio menu.

STEP 1. Click **APPLY**. Click **CLOSE** in the confirmation window.

STEP 1. Click **EXIT** in all menus until all windows are closed.

4.6 HARD DRIVE (HDD) MANAGEMENT

This window displays essential information about the system`s internal hard drive, and lets you format the internal hard drive and external USB flash drive.

The HDD menu displays the following:

- **HDD STATUS**: The system will display "OK" for normal operation. This DVR supports a hard drive up to 2TB.
- **SIZE**: The size (in gigabytes) of the internal hard drive. The size of your system`s internal hard drive will vary by model
- **FREE SPACE**: The space (in gigabytes) remaining on the system`s internal hard drive.

PICTURE 4-11

- **AVAILABLE TIME**: The recording time (in hours) remaining on the HDD based on your current record settings
- **OVERWRITE**: Select **ENABLE** or **DISABLE**. If Overwrite is enabled prior to recording, the system will record over the oldest video data once the hard drive is full. If Overwrite is disabled, the system will stop recording once the hard drive is full and the "FULL" LED on the front panel of the system will light up.

If there is no hard drive in DVR, or the DVR cannot read the hard drive, or the hard drive is not formatted, it will display an "**H**" in the video preview interface.

FORMATTING THE INTERNAL HARD DRIVE

If you installed a new hard drive, you must format the hard drive in the DVR before it can be used. Clicking on the **HDD Format** button will begin the formatting process. After formatting, the system will restart.

CAUTION! Formatting the hard drive erases all video data! This step cannot be undone!

To install a new hard drive, or to replace a defective one, please see **Chapter 8**.

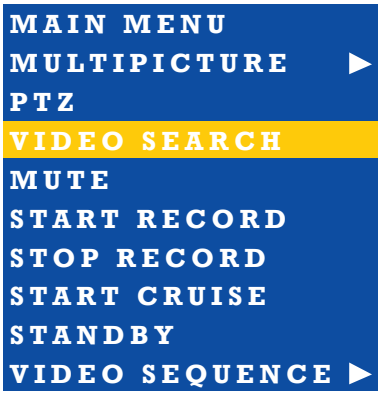
Most currently available USB flash drives are compatible with this DVR, however if you need to reformat your flash drive - say to erase old data - then clicking on the **USB Format** button while the drive is connected to the upper USB port on the front of the DVR will allow you to reformat it. This button is ***not for use*** with any external USB hard drive you may connect to the DVR for backup. External hard drives will need to be formatted using the Fat32 format and this can be done by connecting the drive to the USB port on a PC and reformatting it from there.

4.7 PLAYBACK

View recorded video on the system through the **Search** menu.

VIDEO SEARCH

Select **VIDEO SEARCH** in the **Shortcut** menu or select it in the **Main** menu. When you first open the **Search** menu it will display the current date.



PICTURE 4-11

Click **PLAY** to play back the last minute of recorded video (Quick Search).

To search for a particular event:

1. Select a specific channel to view or select **All**.
2. Enter a date using the Virtual Keyboard
3. Click **Search**

Recorded events (Alarm and Motion Detection-triggered recordings) appear in red while scheduled recordings will be shown in green.

PICTURE 4-12

Click a date in the **Month Grid** (**Item 1 in Picture 4-13**) to search for video files.

Click a time block in the **Hour Grid** (**Item 2 in Picture 4-13**) to view the video. Playback begins. The DVR can play back a single channel in full screen or up to four channels in multi-view mode.

Move the mouse slightly to display the onscreen playback controls. You can also use the playback control buttons on the remote control or on front panel of the DVR.

PICTURE 4-13

USING THE ON-SCREEN PLAYBACK CONTROLS

The controls operate in the same manner as those found on any VCR, DVR or other video player. You can play, pause, fast forward, rewind, and slow down playback.

Drag the slider to adjust the volume (You must have had an audio-capable camera connected to this channel at the time of the event). Select the box to mute the audio.

Click **X** to quit playback and return to the **Search** menu.

PICTURE 4-14

FILE LIST

You can use the File List Shortcut Menu to see a detailed list of all the recorded video on your system.

To open the File List:

STEP 1. From the **Search** menu, click **SEARCH** and enter the time period you wish to search the system for recorded video.

STEP 2. Click **FILE LIST** at the bottom of the menu. This will open the **File List** window.

PICTURE 4-15

To use the File List:

STEP 1. Under **TYPE**, select **NORMAL** to view only normal recordings, **ALARM**, to view alarm recordings (includes alarm and motion detection), or **ALL** to view all video on your system.

STEP 2. Use the buttons on the side panel to navigate the file list:

- **FIRST**: Jump to the first page of the list
- **PRE**: Turn to the previous page
- **NEXT**: Turn to the next page
- **LAST**: Jump to the last page of the list
- **ALL**: Select all files
- **OTHER**: Clear all files
- **BACKUP**: After selecting a file(s), click to begin copying the data to a USB flash drive;

Click any file to begin playback.

4.8 BACKUP

Once you have located a recorded video event on your system's hard drive, you can copy it to a USB flash drive. Most USB flash drives are compatible with this DVR.

Backing Up Recorded Data

STEP 1. Connect a blank USB flash drive to the top USB port on the front panel of the DVR.

STEP 2. Open the **Search** menu and search for recorded data on the system.

STEP 3. Click **FILE LIST**.

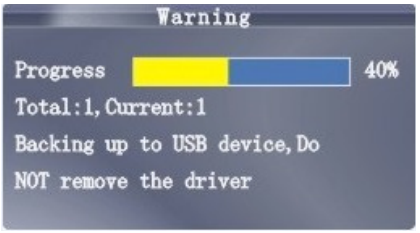
STEP 4. Select the files you want to backup and click the **BAK** box next to the file name (**See Picture 4-9**). Select multiple files if desired. Click **ALL** to select all files; click **OTHER** to deselect all files.

PICTURE 4-16

NOTE! The size of each file is shown in the File List menu. Use this to help you find a USB flash drive large enough to hold all the files you wish to backup.

STEP 5. Click **BACKUP** from the side-panel to immediately begin copying the files to the USB flash drive.

The download progress will be displayed in the status window.



PICTURE 4-17

CAUTION! DO NOT remove the USB flash drive during backup.

USING THE PLAYBACK SOFTWARE

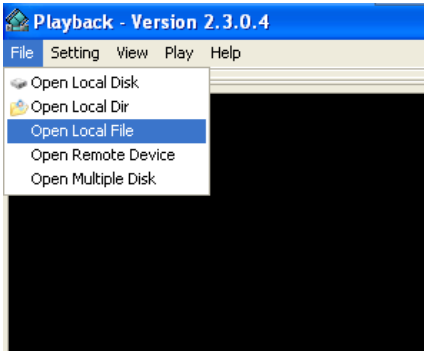
The **Playback** software included on the accompanying software disk will play back the video files created by your DVR. These files have a **.264** file extension and will not play on standard media player software unless you convert them to .avi format using the Playback program.

Install the Playback software to your computer as normal before attempting to view video you have backed up.

To view a video file on your computer

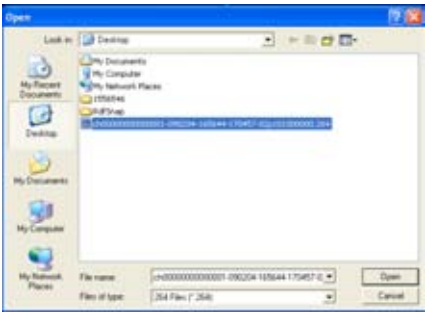
STEP 1. Copy one or more backup files to your PC.

STEP 2. Launch the Playback software and select "Open Local File" from the File Menu.



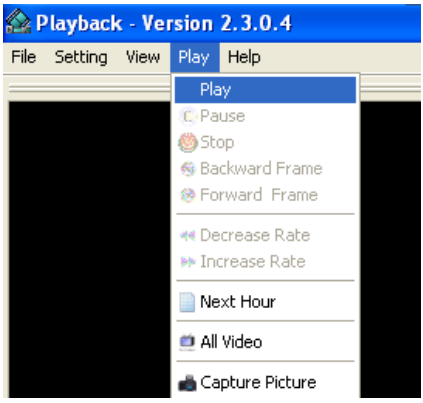
PICTURE 4-18

STEP 3. Navigate to the file you wish to play back. It should have a .264 file extension.



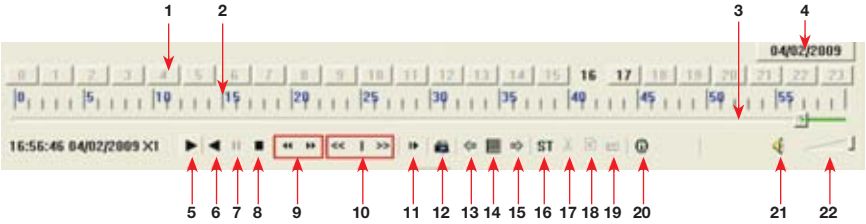
PICTURE 4-19

STEP 4. Once you've loaded the file into the program, click the **Play** menu and select **Play**.



PICTURE 4-20

STEP 5. When you select **Play**, a **Playback Control Bar** will appear.



PICTURE 4-21

#	Function	#	Function
1	Hour Blocks	2	Minute
3	Progress Bar	4	Date
5	Play	6	Previous Recording File
7	Pause	8	Stop
9	Previous Frame / Next Frame	10	Slow Play, Normal Play, Fast Play
11	Next Hour	12	Snapshot
13	Reduce window	14	Play All Channels
15	Add window	16	Start
17	Cut	18	Delete
19	Convert AVI	20	On-Screen Display
21	Mute	22	Volume

Click the ▲ button on the bottom of the multimedia player and then click the **Play** button (**Item number 5 in Picture 4-21**) to start playing the file.

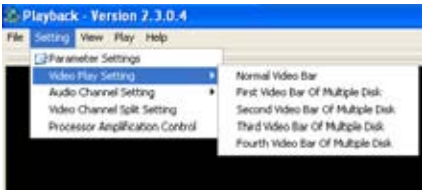
The **Playback Control Bar** shows the date the file was recorded. The Hour Blocks indicate (in 24 hour format) at what hour the event took place. The green area in the Progress Bar shows when in that hour the event occurred as well as how far the player is in the video recording.

The example displayed in **Picture 4-21** above, shows that the event being played was recorded on April 2, 2009 from 4:57pm (16:57) to 5pm. Clicking on the Next Hour button (**Item number 11 in Picture 4-21**) would take the user to the rest of the event beginning at 5:00.00.

Video Play Settings

Each video record contains data from all the cameras that were recording at that time. You can view up to four of those recordings at one time by clicking on the "Play All Channels" button (**Item number 14 in Picture 4-21**). Or, you can choose which channel will be played back in the Playback software by following these steps:

STEP 1. In the Setting menu in the Playback software toolbar, select Video Play Setting


Playback - Version 2.3.0.4
File Setting View Play Help
Parameter Settings
Video Play Setting
Audio Channel Setting
Video Channel Split Setting
Processor Amplification Control
Normal Video Bar
First Video Bar Of Multiple Disk
Second Video Bar Of Multiple Disk
Third Video Bar Of Multiple Disk
Fourth Video Bar Of Multiple Disk

PICTURE 4-22

STEP 2. From that pull-down menu, choose Normal Video Bar.

STEP 3. In the resulting pop-up window, choose which channel you wish to view.

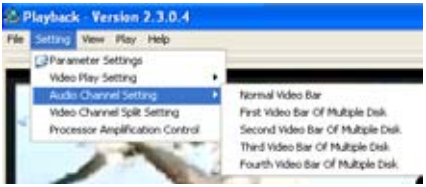
STEP 4. Check the box ☑ next to "Play the Video". Click **Apply** then **OK**.

PICTURE 4-23

Audio Settings

If you have connected an audio-capable camera or a microphone to Channels 1 or 2, you can play back recorded audio along with the video.

STEP 1. In the Setting menu in the Playback software toolbar, select Audio Channel Setting.

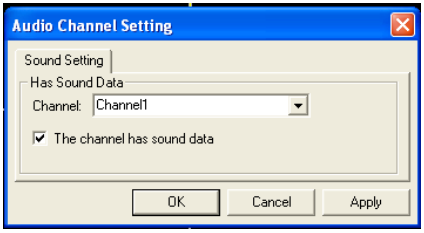

Playback - Version 2.3.0.4
File Setting View Play Help
Parameter Settings
Video Play Setting
Audio Channel Setting
Video Channel Split Setting
Processor Amplification Control
Normal Video Bar
First Video Bar Of Multiple Disk
Second Video Bar Of Multiple Disk
Third Video Bar Of Multiple Disk
Fourth Video Bar Of Multiple Disk

PICTURE 4-24

STEP 2. From that pull-down menu, choose Normal Video Bar.

STEP 3. In the resulting pop-up window, choose which channel you wish to enable audio for.

STEP 4. Check the box ☑ next to "The channel has sound data". Click **Apply** then **OK**.

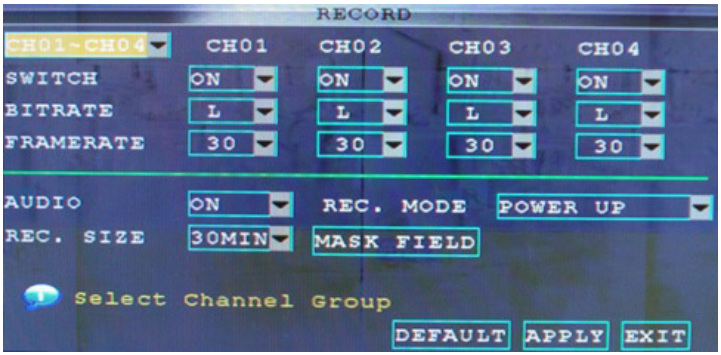


PICTURE 4-25

The controls for scheduling recording are mostly found in the **Record** menu which is located in the **Main Menu**. Certain features, such as Motion Detection, are located in the **Advanced** menu (also reachable through the **Main Menu**) but are included here for ease of instruction.

5.1 RECORDING CONFIGURATION

In addition to scheduling the recording times for your cameras, you can also set resolution format, bitrate, recording block size, audio feed and recording mode among other parameters.



PICTURE 5-1

The menu will only display four channels at a time. The pull-down menu in the upper left of the menu allows you to switch between groups of four channels; 1-4, 5-8, 9-12 and 13-16.

The recording options for each camera can be selected independently and are available below each camera's channel number.

CHANNEL. Enable/disable recording for a specific camera by toggling it On or Off using the pull-down menu.

RESOLUTION On the QS 206, CIF is the only resolution option. The QS408 offers the larger and clear D1 recording format on channels 1 and 2.

BITRATE Select BEST, FINE, or NORMAL. Set up the code rate for recording corresponding to 768Kbps, 512Kbps and 384Kbps.

AUDIO If you have a powered microphone or audio-capable camera connected to Channels 1 and/or 2, you can select ENABLE to record the audio feeds. Audio feeds are not possible on other channels.

REC. MODE Select **POWER UP** to record continuously from the time the DVR is turned on. If you select **TIMER RECORD**, you will need to set a recording schedule on the system.

REC. SIZE Record Size sets the file size for recorded video files on the system. Instead of recording data as one large file, the system will divide the data into blocks of 15, 30, 45, or 60 minutes. This makes the recorded data easier to search.

Click **APPLY** to save your settings. Click **CLOSE** in the confirmation window.

Click **EXIT** in every menu until all windows are closed.

5.2 RECORDING SCHEDULE

The DVR is set by default to record continuously on all channels. You can program the system to record according to a customized recording schedule.

The **Schedule Grid** shows the days of the week and hours 0~23. You can set Alarm Recording (Red), General (Normal) Recording (Green), or No Recording (Blue) to each time block of each day.

PICTURE 5-2

To set a recording schedule:

STEP 1. Open the **Main Menu** and click **RECORD**.

STEP 2. Under **REC. MODE**, select **TIMER RECORD**.

STEP 3. Click **SCHEDULE**. The **Schedule** menu opens.

STEP 4. Under **CHANNEL**, select specific channels or select **ALL**.

STEP 5. Below the grid, click either **ALARM** (red), **GENERAL** (Green), or **NO RECORD** (Blue) and then click a time block on the desired day.

STEP 6. Use the **FROM/TO** drop-down menus to copy the schedule of one day to another. For example, if you want your schedule for Monday to be the same on Wednesday: under **FROM** select **MON**, under **TO** select **WED**, and then click **COPY**.

STEP 7. Click **SAVE**.

STEP 8. Click **EXIT** in each menu until all windows are closed.

Example

You want your system to record continuously on all channels from 9 AM to 5 PM Monday to Friday. You also want Alarm/Motion recording from 5 PM to 9 AM. You do not want the system to record Saturday or Sunday.

PICTURE 5-3

STEP 1. Open the **Schedule** menu.

STEP 2. Under **CHANNEL**, select **ALL**.

STEP 3. Click the blue **NO RECORD** block below the grid. A checkmark will appear in the block.

STEP 4. Under SUN, click blocks 00~23. The blocks will turn blue.

STEP 5. Under FROM, select SUN. Under TO select SAT, and then click COPY.

Step 6. Click the red ALARM block below the grid.

STEP 7. Under MON, click blocks 00~08 and blocks 18~23. The blocks will turn red.

STEP 8. Under FROM, select MON. Under TO select TUE, and then click COPY. Repeat for Wednesday, Thursday, and Friday.

Your completed schedule should the same as the schedule in Picture 5-3. **Save** your settings and **Exit** the window.

5.3 MASK FIELD

The Mask Field lets you block a specific portion of a channel you do not want recorded or shown on the display screen. This can be useful if you need to conceal a sensitive area being captured by the installed camera.

To use the mask field:

STEP 1. From the **Record** menu, click **MASK FIELD SETUP**. The **Mask Field** menu opens.

STEP 2. Choose a channel you wish to apply the Mask Field.

STEP 3. Select **ON** from the **SWITCH** drop-down menu.

STEP 4. Click **SETUP**. The **Mask** menu will be replaced by the full-screen camera view of the desired channel.

STEP 5. Using the mouse, click and drag the cursor over the area you want to conceal. A single click will produce a small black square.

STEP 6. Right-click anywhere on the screen to return to the Mask Field menu.

STEP 7. Click **APPLY**. Click **CLOSE** in the confirmation window.

STEP 8. Click **EXIT** in all menus until all windows are closed.

PICTURE 5-4

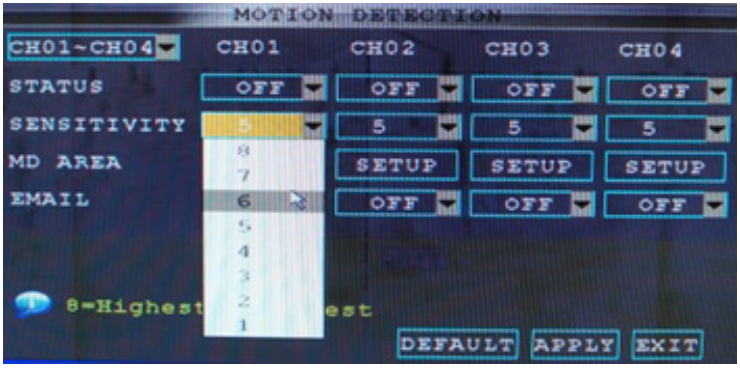
PICTURE 5-5

5.4 MOTION DETECT

The **Motion Detection** menu can be found by accessing the **Advance** menu from the **Main Menu**. In this menu you can configure motion detection for each channel.

The menu will only display four channels at a time. The pull-down menu in the upper left of the menu allows you to switch between groups of four channels; 1-4, 5-8, 9-12 and 13-16.

The motion detection options for each camera can be selected independently and are available below each camera's channel number.



PICTURE 5-6

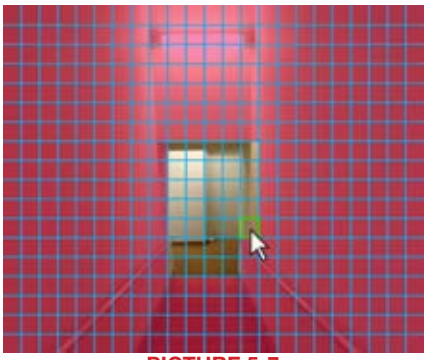
Motion Detection Settings

STATUS Select ON to enable motion detection for the desired channel.

SENSITIVITY Select 1 through 8. The higher the number, the more sensitive the motion detection.

MD SETUP This allows you to chose which areas of the camera's field of view should detect motion.

- **STEP 1**. Click **SETUP** and a motion detection grid appears over the selected camera's video in full screen.
- **STEP 2**. Click the blocks in the grid to enable/disable motion detection. Red=Motion detection enabled Clear=Motion detection disabled.
- **STEP 3**. Right-click anywhere on the screen to return to the Motion Detection menu.
- **STEP 4**. Click **APPLY**. Click **CLOSE** in the confirmation window.
- **STEP 5**. Click **EXIT** in all menus until all windows are closed.



PICTURE 5-7

The Motion Detection buzzer can be enabled or disabled in the Alarm Setup menu covered in **Section 6.1 Alarms**.

EMAIL An email alarm can be assigned to individual channels. Email notifications are covered in **Section 6.2 Email**.

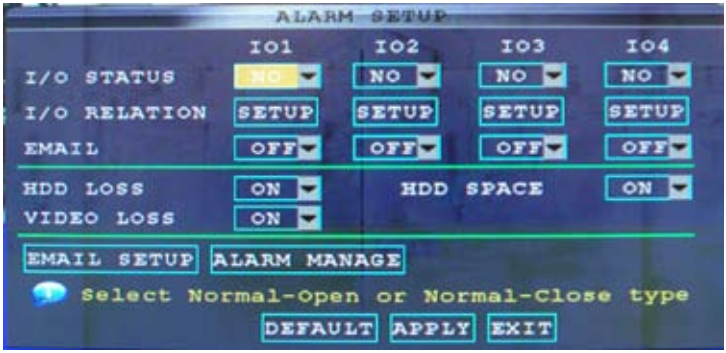
Use the Advanced Setup menu to configure alarm settings, motion detection, mobile surveillance, PTZ settings and network settings. The **Advanced Setup** menu contains the following sub-menus: **Alarm**, **Info**, **Motion Detection**, **Mobile**, **System**, **PTZ**, and **Network**.

PICTURE 6-1

6.1 ALARM

Use the Alarm menu to configure alarm and email settings. External alarm devices must be connected to the alarm block on the rear panel of the system in order to use the I/O (input/ Output) alarms of the system.

The motion detection options for each alarm channel can be selected independently and are available below each port's number.



PICTURE 6-2

ALARM SETTINGS

I/O CHANNEL Consult your alarm's manual for the proper settings. Select NO (Normal Open), NC (Normal Closed), or OFF.

HDD LOSS The alarm will sound if the internal hard drive is damaged

HDD SPACE The alarm will sound when the hard drive is full (if overwrite is disabled)

VIDEO LOSS The alarm will sound when a camera is disconnected

ALARM MANAGE Clicking on this button will open a new window.

OUTPUT Set the output time (in seconds) on the spot monitor from 0, 10, 20, 40, or 60 seconds.

BUZZER Set the time (in seconds) for the buzzer when an alarm is triggered—0, 10, 20, 40, or 60 seconds.

Set the buzzer to 0s if you want to disable the alarm during motion detection

POST REC Set the time (in seconds) for the system to record after a triggered alarm—0, 10, 20, 40, or 60 seconds.

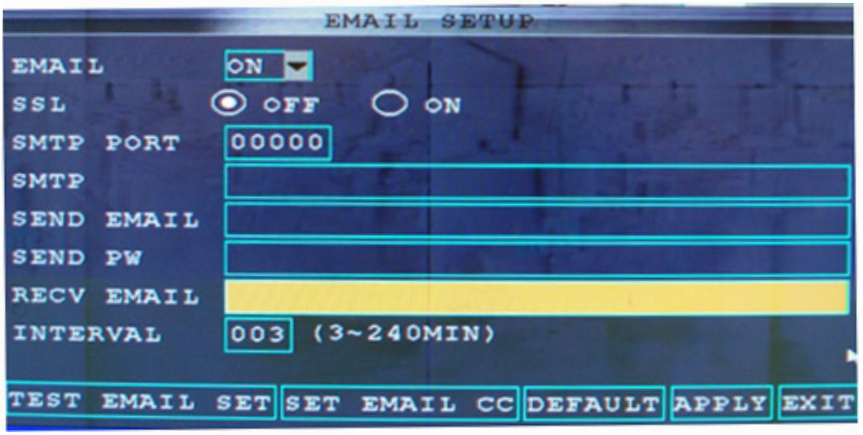
PICTURE 6-3

Click **APPLY** and then click **CLOSE** in the confirmation window.

6.2 EMAIL SETUP

The system can send an email notification with a JPEG snapshot for triggered events on the system. Selecting **Email Setup** in the **Alarm Setup** menu will open the **Email Setup** menu. Your DVR will need to be connected to the Internet - either through a router or by being directly connected to a modem - in order to be able to send out email alerts.

NOTE! Depending upon your settings, the system can generate a lot of e-mail alerts. For that reason, we recommend setting up a dedicated e-mail address specifically for the system to send alert notices. If you do not have your own e-mail system (such as a corporate mail server) you should consider using a free e-mail provider. However, because many free e-mail services allow only a limited amount of e-mail traffic we specifically recommend using Google's Gmail service with its higher limit. Similarly, you will want the alert e-mails to go to a different account than the one sending them. This will ease your management of these alerts.



PICTURE 6-4

For the example below, we will use Gmail. The settings can be found under **Options** when logged into your Gmail account. If you have a corporate mail server, you will need to consult with your IT department regarding proper settings.

STEP 1. Select **ON** in the pull-down menu to the right of **EMAIL**.

STEP 2. **SSL** Leave SSL turned OFF. SSL deals with encryption. Only advanced users should enable this option.

STEP 3. **SMTP PORT** Enter the SMTP port of your email server. Gmail's is 465.

STEP 4. **SMTP** Enter the SMTP address of your email server. For example, smtp.gmail.com

STEP 5. **SEND EMAIL** The "from" address of your alerts.

STEP 6. **SEND PW** Enter the password of your sending email account

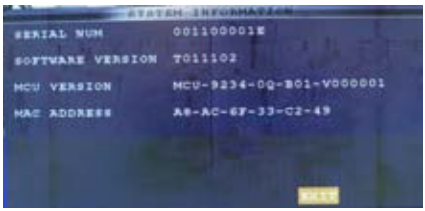
STEP 7. **RECV EMAIL** Enter the destination email address for your notifications.

STEP 8. Click **APPLY** and then click **CLOSE** in the confirmation window.

STEP 9. Click **EXIT** in all menus until all windows are closed.

6.3 SYSTEM INFO

This window will allow you to view system information - including the firmware version, MAC address, and serial number of the system.



PICTURE 6-5

Check this window to determine whether you need to update to a newer version of the firmware. Updating the firmware is covered in **Section 6.4 System**.

MOTION DETECTION

This was covered in Section 5.4 Motion Detection.

MOBILE ACCESS

This will be covered in Section 7.4 Mobile Access

6.4 SYSTEM

Use the System menu to update system firmware and set an automatic system reset schedule.

PICTURE 6-6

Like most conventional computers, the DVR can benefit from being occasionally shut down and re-started. This clears the memory and improves performance.

ENABLING AUTO-RESET

STEP 1. Select On in the **AUTO RESET** pull-down menu. The **Settings** option will appear below.

STEP 2. In the **SETTINGS** pull-down menu, select **EVERY DAY**, **EVERY WEEK**, or **EVERY MONTH**. If you choose **EVERY MONTH**, the date drop-down menu will appear.

STEP 3. Select the date for auto-reset from the drop-down menu.

STEP 4. Enter the time for auto-reset using the Virtual Keyboard.

STEP 5. Click **APPLY**, then click **CLOSE** in the confirmation window.

RESTORING FACTORY SETTINGS

STEP 1. Click **DEFAULT SETTINGS**. This will restore the system to the original factory settings.

STEP 2. Click **OK** in the prompt.

IMPORTANT! Restoring factory settings will cause any settings you've made to the system to be removed! This includes recording and network setups along with passwords!

RESTARTING THE DVR (SOFT-RESET)

STEP 1. Click **RESTART**.

STEP 2. Click **OK** in the prompt. The system will perform a soft-reset and load to a live split-screen view.

UPGRADING THE FIRMWARE

STEP 1. Copy the firmware file to an empty USB flash drive. The firmware file should not be in a folder.

STEP 2. Connect the USB flash drive to the top USB port on the front panel of your system.

STEP 3. Open the System Menu.

STEP 4. Click **FIRMWARE UPDATE**. The system will scan the USB flash drive and begin updating the firmware. ***Do not remove the USB flash drive while the upgrade is taking place.***

STEP 5. Click **CLOSE** in the confirmation window. In the system prompt, click **OK**. The system will restart.

PICTURE 6-7

6.5 PAN-TILT-ZOOM CAMERAS (PTZ)

Use the PTZ Setup menu to configure settings for an optional PTZ camera.

NOTE! Consult the instruction manual of your PTZ camera for complete information about your camera, including protocol and baud rate.

The menu will only display four channels at a time. The pull-down menu in the upper left of the menu allows you to switch between groups of four channels; 1-4, 5-8, 9-12 and 13-16.

The PTZ setting options for each camera can be selected independently and are available below each camera's channel number.

PICTURE 6-8

Configuring a PTZ camera:

STEP 1. Connect a PTZ camera to the BNC and 485A (TX, +) and 485B (RX, -) ports and power outlet.

STEP 2. **PROTOCOL** Select PELCO-D or PELCO-P for the selected channel.

STEP 3. **BAUD RATE** Select 1200, 2400, 4800, or 9600.

STEP 4. **DATA BIT** Select 5, 6, 7, or 8.

STEP 5. **STOP BIT** Select 1 or 2.

STEP 6. **VERIFY** Select **ODD**, **EVEN**, **MARK**, **SPACE**, or **NONE**.

STEP 7. **ADDRESS** Enter an address from 001~255 using the Virtual Keyboard. Refer to your PTZ camera`s instruction manual for further details.

STEP 8. Click **APPLY** and then click **CLOSE** in the confirmation window.

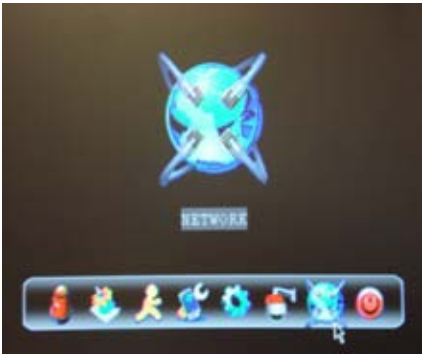
STEP 9. Click **EXIT** in all menus until all windows are closed.

REMOTE ACCESS

CHAPTER 7

If you are only going to access the DVR from a computer that is attached to the same router as the DVR you only need to setup the information in the NETWORK settings using either the DHCP option or assigning a static IP following the instructions below. Since you are just going from one location to another on the same network, port forwarding and knowing the public IP address are not necessary. You will just access the DVR by entering the IP address of the DVR from the NETWORK setup into the Internet Explorer browser window. After you setup the NETWORK settings using DHCP or Static IP instructions skip down to the section **Accessing the DVR through Internet Explorer**.

The **Network Settings** menu is reached from the **Advanced Settings** menu - which is found in the **Main Menu**.



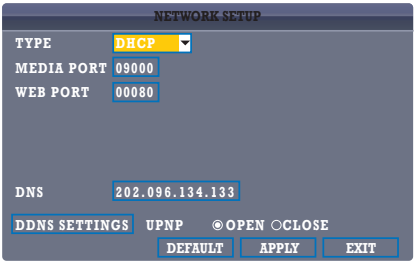
PICTURE 7-1

7.1 NETWORK SETUP

There are five ways you can setup the DVR to be accessed remotely; DHCP, UPnP, Static IP, PPPOE, and DDNS. The Network Setup menu is accessed through the **Main Menu**.

DHCP

Select DHCP from the drop down box and then select the **Apply** button so the router can find it and assign it an IP address. After the router has assigned the DVR an IP address it is a good idea to write down this address and then select **Static** from the drop down box and enter this address as a static address so it will not change if you shutdown DVR or the router. This is the IP address you will forward port 80 to on the router so you can access the DVR from remote computers.



PICTURE 7-2

UPNP

Universal Plug and Play, or UPnP for short, is a new set of networking protocols created by consumer electronics manufacturers to allow easier connections of networked devices such as computers, printers, mobile devices and network-capable security DVRs. Your DVR has UPnP functionality built in which allows it to automatically seamlessly connect to a network, obtain an IP address on that network and interact with other devices on the network - without the need for special software or time-consuming configuration routines.

Your Router must support UPNP function in order to use this protocol.

NOTE! The DVR and PC must be connected to the same router.

Things you will need to know :

1. The make and model of the router.
2. Whether your router supports UPnP
3. The IP address for the router.
4. You will be forwarding ports **80**, **100** and **9000**.

NOTE! Check with your DVR's owner manual or the website of your router's manufacturer to determine whether it supports UPnP. If it does not, then you will need to follow the instructions for Simple Port Forwarding as laid out in **Section 7.2**. If you are still unsure about whether your router supports UPnP, you can determine this by proceeding with **Part 1**, below.

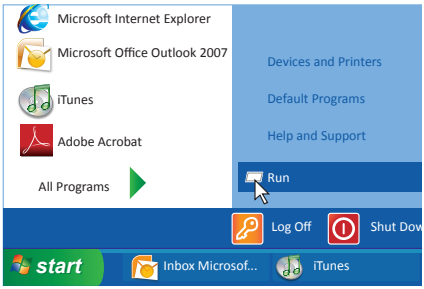
PART 1: ACCESSING YOUR ROUTER

You will need your router's IP address in order to access it's controls.

To locate the IP address of your router:

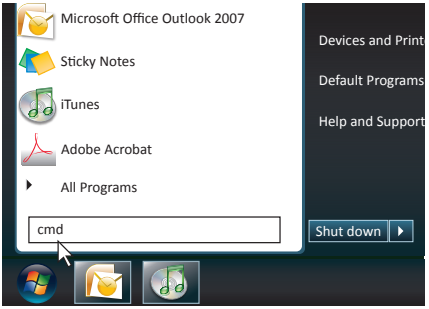
STEP 1. To access the router's settings you will need to enter the **Command** (CMD) panel on a computer also connected to the same router.

A. WINDOWS XP – Select **Run** from your Windows **START** menu (lower left of screen) and type "**cmd**" after the prompt.



PICTURE 7-3

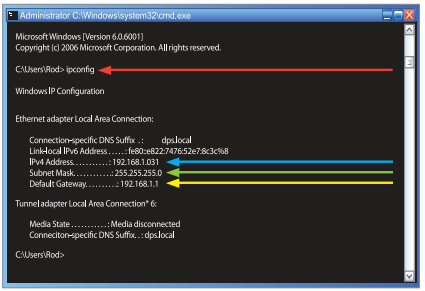
B. WINDOWS VISTA and **WINDOWS 7** – Click on the **START** menu (Windows icon) in the lower left of your screen. Type "**cmd**" into the field that says, "**Search programs and files**" and hit **ENTER** or click on the magnifying glass icon.



PICTURE 7-4

STEP 2. Type "**ipconfig**" at the prompt (**Red arrow in Picture 3**) to access router settings.

STEP 3. The "Default Gateway" (**Yellow arrow**) is the IP address for your router.

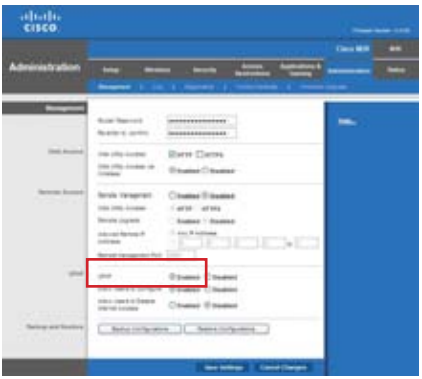

Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.0.6001]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.
C:\Users\Rod> ipconfig
Windows IP Configuration
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . : dps.local
Link-local IPv6 Address . . . . . : fe80::e822:7476:52e7:8c3c%8
IPv4 Address. . . . . : 192.168.1.031
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.1
Tunnel adapter Local Area Connection* 6:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . : dps.local
C:\Users\Rod>

PICTURE 7-5

PART 2: ACTIVATING UPnP in the router

STEP 4. Enter the router's IP address into the address field in a web browser window. This will open your router's settings window.

STEP 5. Activate UPnP. Each manufacturer uses their own method for locating and activating UPnP as shown by the red boxes in the example pictures below. Again, you should consult your router's manual or the manufacturer's website for specifics.



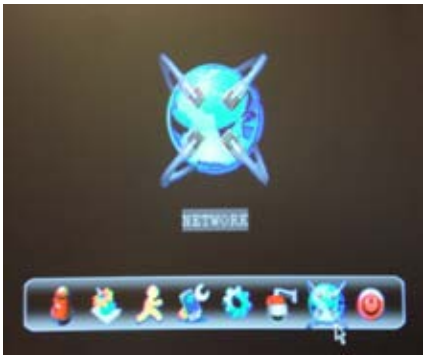
PICTURE 7-6

PICTURE 7-7

PART 3: ACTIVATING UPnP in the DVR

STEP 6. On the DVR, access the **Network** menu from the **Advanced Settings** menu.

PICTURE 7-8

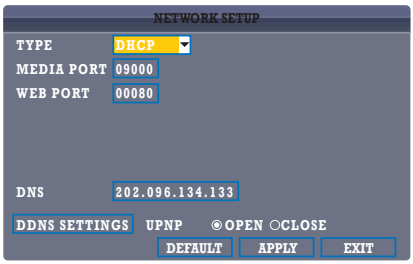


PICTURE 7-9

STEP 7. Set Network Type to **DHCP** and click **OPEN** next to UPNP.

STEP 8. Click on **Apply** and then **OK** to save your settings before exiting this menu.

STEP 9. Restart your DVR.



PICTURE 7-10

STEP 10. Check the status of ports **80**, **100** and **9000**, by going to ***www.canyouseeme.org*** and entering the port numbers one at a time.

If you receive the "Success!" message then you are ready to begin remotely monitoring your DVR by entering the IP address displayed by CanYouSeeMe.

PICTURE 7-11

If you do not receive the "Success!" message, you should change the port number listed to the right of **Web Port** (**see Picture 7-10**) from 80 to 85 or 89 in the Network Settings Menu and begin again with **Step 8**.

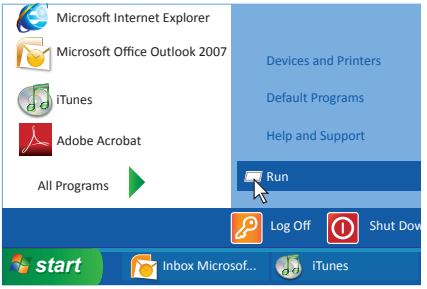
STATIC IP

You will need to setup the network settings on the DVR to match the settings of the router to which your DVR is connected. ***Owners of 2Wire Brand routers should use DHCP.***

To get the router settings:

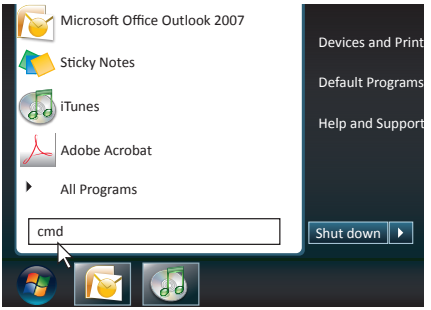
STEP 1. To access the router's settings you will need to enter the **Command** (CMD) panel on a computer also connected to the same router.

A. WINDOWS XP – Select **Run** from your Windows **START** menu (lower left of screen) and type "**cmd**" after the prompt.



PICTURE 7-12

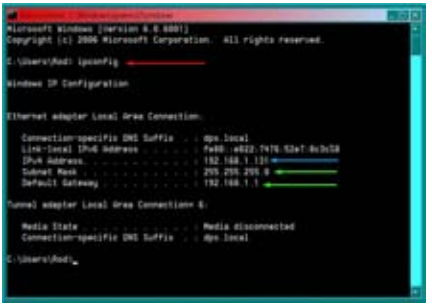
B. WINDOWS VISTA and **WINDOWS 7** – Click on the **START** menu (Windows icon) in the lower left of your screen. Type "**cmd**" into the field that says, "**Search programs and files**" and hit **ENTER** or click on the magnifying glass icon.



PICTURE 7-13

STEP 2. Type "**ipconfig**" at the prompt (**Red arrow in Picture 7-14**) to access router settings.

STEP 3. Write down the IP4v address (**Blue arrow**) as well as the gateway and subnet mask numbers (**Green arrows**).



PICTURE 7-14

STEP 4. so you can copy them into the **Network Settings** menu on the DVR (**Green arrows in Picture 7-15**).

STEP 5. To create the DVRs IP address (**Red arrow in Picture 7-15**) you will need to enter the same first 3 sets of numbers as the gateway and select a fourth set of numbers that is different then any other device attached to the same router. If the IP address of your computer in the ipconfig (**Blue arrow in Picture 7-14**) is a single or two-digit number you should be ok with any three digit number, if the computer IP address ends with a number in the 100s then you should go with a 200 number.

PICTURE 7-15

PPPOE

If you are going to attach the DVR directly to a DSL or Cable modem instead of a router you will want to select the **PPPOE** option in the **NETWORK** options.

Contact your ISP for the User Name and Password needed for the router. Select **PPOE** from the Type pull-down menu and hit **OK**. Enter the User Name and Password into the appropriate fields.

PICTURE 7-16

7.2 PORT FORWARDING

Port Forwarding allows computers and devices outside of your network to communicate with the DVR. You will need to forward ports 80, 100 and 9000 from the attached router to the IP address of the DVR.

NOTE! The DVR and PC must be connected to the same router and both must be powered up before proceeding.

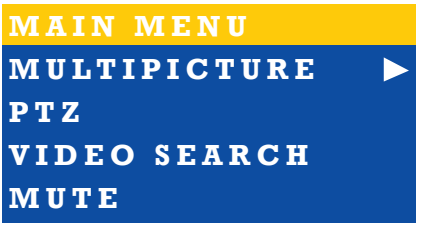
Things you will need to know :

1. The make and model of the router.
2. If you changed the default router login, then you will need to know the user name and password for that router.
3. The IP address for the router.
4. You will be forwarding ports **80**, **9000** and **100**.

PART 1: DETERMINE THE IP ADDRESS OF THE DVR

To find out the IP of DVR for QS series DVR do the following:

Using the mouse, right-click and then select **Main Menu** in the pop-up shortcut menu.

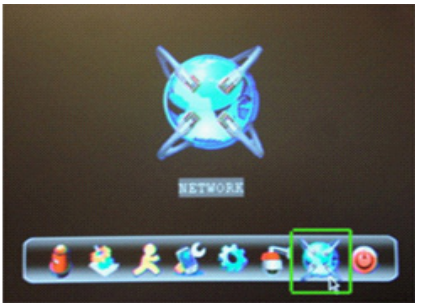


PICTURE 7-17

Select **ADVANCE** in the **Main Menu** window.

PICTURE 7-18

Click on **NETWORK** in the **Advanced Settings** Menu.



PICTURE 7-19

STEP 1. Select **DHCP** from the **Type** drop-down menu,

STEP 2. Click on **APPLY**

STEP 3. Select **EXIT**.

STEP 4. Restart the DVR.

PICTURE 7-20

Once the DVR has restarted, reopen the **Network Setup** window and the IP address of the DVR will now be listed. This is the address to which you will forward ports 80 and 9000. If you plan to access your DVR via a smartphone, you will need to forward port 100 as well.

PICTURE 7-21

PART 2: DETERMINE THE NUMBER OF ROUTERS ON THE NETWORK

To find out the number of routers on your network, you will need to download a **FREE** router detection program.

STEP 1. Go to ***http://www.pcwintech.com/shanes-toolbox***

STEP 2. Click on **Detect Multiple Routers** to begin the download.

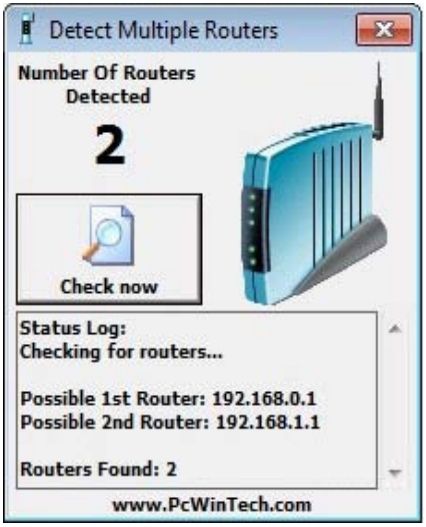
PICTURE 7-22

STEP 3. Unzip the application to install it.

STEP 4. Click on the **detect_routers** application to run it.

PICTURE 7-23

STEP 5. Click on **CHECK NOW** to detect how many Routers are in the network.



PICTURE 7-24

STEP 6. If there is only one router detected, then you may skip to **Step 3: Simple Port Forwarding**.

If Multiple Routers are Detected

If there are multiple routers, you will see a display similar to **Picture 7-25**.

If so, it may be preferable to connect your DVR and computer to the router that connects directly to the Internet. However, this is not always possible depending upon your particular situation.

PICTURE 7-25

In this case, you will need to proceed with the next section using the IP address for Router 1 to forward its ports. After that, you will need to proceed with **Part 4: Setting Up DMZ on Router 2**.

PART 3: DOWNLOAD SIMPLE PORT FORWARDING PROGRAM

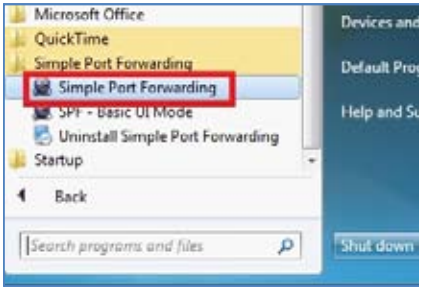
Download the **FREE** Simple Port Forwarding program from:
http://www.simpleportforwarding.com/download

Click on **Download on Mirror 7** to download and install this program.

Make sure to check out all the programs
This is a Free/Pro Program.
2000, XP, 2003, Vista, 2008, 7 & Requires Internet Explorer 6.0 or higher
Current Version: 3.0.21
Supported Routers: 1,602
Main Language: English
Supported Languages: 52
DOWNLOAD
Mirror 1 (MajorGeeks.com)
Mirror 2 (Softpedia.com)
Mirror 3 (SnapFiles.com)
Mirror 4 (FiberDownload.com)
Mirror 5 (SoftSea.com)
Mirror 6 (Programosy.pl)
Mirror 7 (Direct Download)
Need to check that your port forwarding is working?
Click Here
Zip File (Non Setup) Portable Version (Direct Download)

PICTURE 7-26

Once the program is installed, go to the Windows **Start Menu** (Windows icon in the lower left of your monitor) and look for **Simple Port Forwarding** in the program list. Click on the program to launch it.



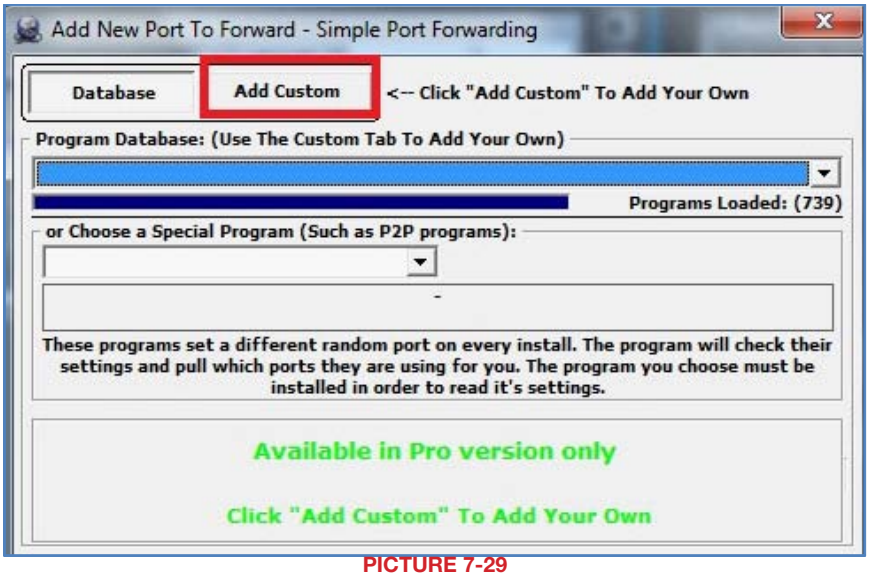
PICTURE 7-27

Once **Simple Port Forwarding** has launched, select your router from the list. The default Router IP and Login information will automatically come up. If you have previously changed the login information, then you will have to enter it manually

PICTURE 7-28

Click on "**+**" at the bottom to open the window allowing you to set your ports.

Click on **ADD CUSTOM**.

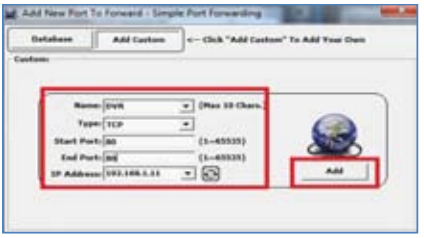

Add New Port To Forward - Simple Port Forwarding
Database
Add Custom
<-- Click "Add Custom" To Add Your Own
Program Database: (Use The Custom Tab To Add Your Own)
Programs Loaded: (739)
or Choose a Special Program (Such as P2P programs):
These programs set a different random port on every install. The program will check their settings and pull which ports they are using for you. The program you choose must be installed in order to read it's settings.
Available in Pro version only
Click "Add Custom" To Add Your Own

PICTURE 7-29

Input the required information:

Name: (You can name your DVR if you wish)
Type: TCP
Start Port: 80
End Port:80
IP add: IP of DVR obtained in **Step 1**.

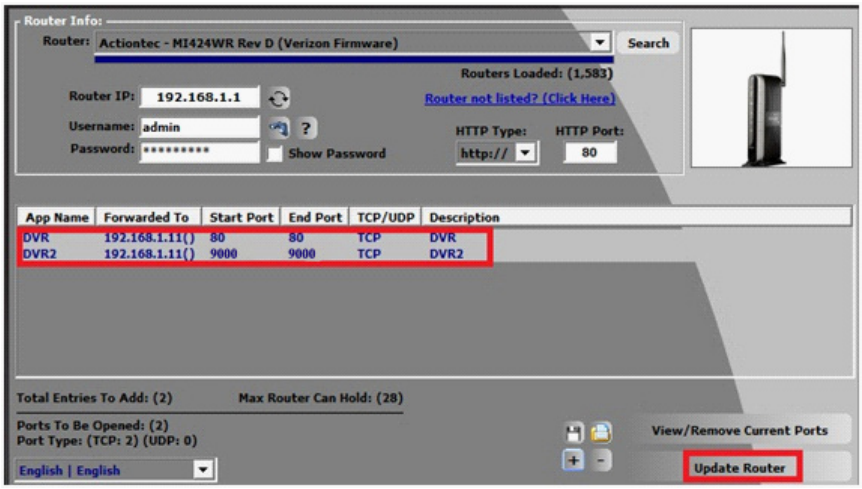
Click on **ADD**



PICTURE 7-30

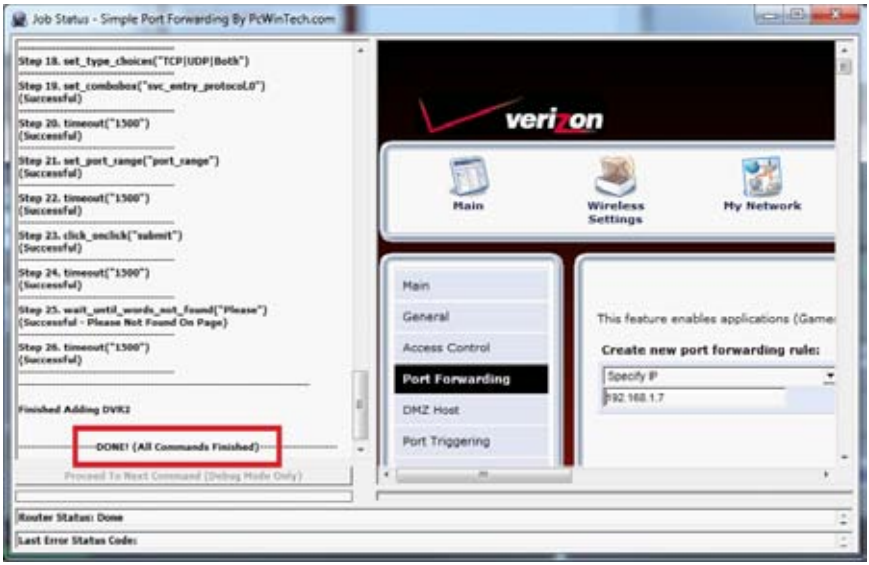
Repeat for port 9000, and also for 100 to allow smartphone access.

You will now be returned to the main window of the program. The ports you added will now show on the list. Click on **Update Router** at the bottom.


Router Info:
Router: Actiontec - MI424WR Rev D (Verizon Firmware)
Search
Routers Loaded: (1,583)
Router IP: 192.168.1.1
Router not listed? (Click Here)
Username: admin
Password: *********
Show Password
HTTP Type: http://
HTTP Port: 80
App Name | Forwarded To | Start Port | End Port | TCP/UDP | Description
DVR | 192.168.1.11() | 80 | 80 | TCP | DVR
DVR2 | 192.168.1.11() | 9000 | 9000 | TCP | DVR2
Total Entries To Add: (2)
Max Router Can Hold: (28)
Ports To Be Opened: (2)
Port Type: (TCP: 2) (UDP: 0)
English | English
View/Remove Current Ports
Update Router

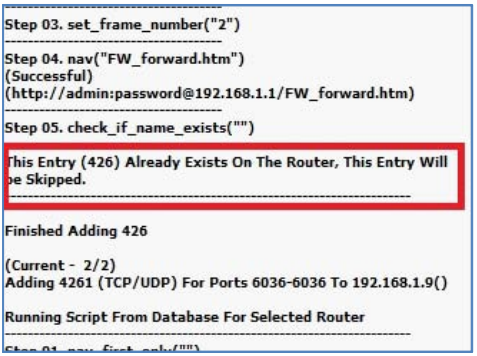
PICTURE 7-31

You will see the "Updating is in progress" message. Please wait until you see it say **DONE** at the bottom.



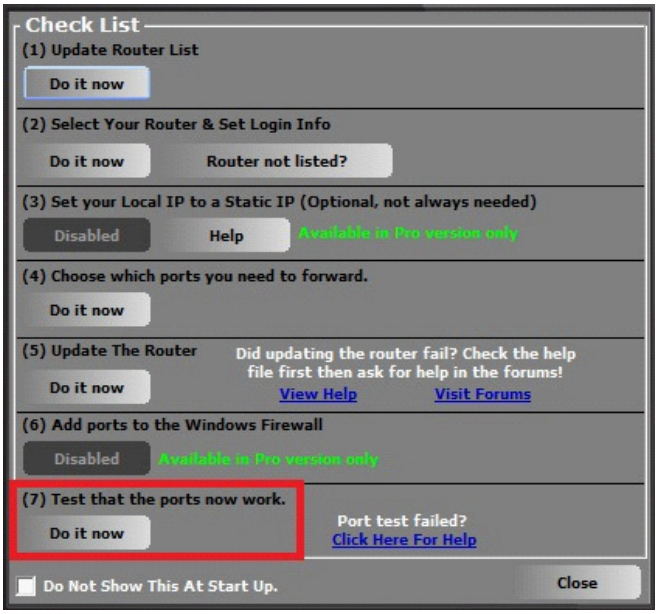
PICTURE 7-32

If for some reason, a port or ports that you forwarded are not listed in the Router and if you see a message in the Scripts list on the left side of the window stating that the port already exists (**Red box in Picture 7-33**), then you will need to change the Port 80 to 85 in the DVR and start over again.


Step 03. set_frame_number("2")
Step 04. nav("FW_forward.htm")
(Successful)
(http://admin:password@192.168.1.1/FW_forward.htm)
Step 05. check_if_name_exists("")
This Entry (426) Already Exists On The Router, This Entry Will be Skipped.
Finished Adding 426
(Current - 2/2)
Adding 4261 (TCP/UDP) For Ports 6036-6036 To 192.168.1.9()
Running Script From Database For Selected Router

PICTURE 7-33

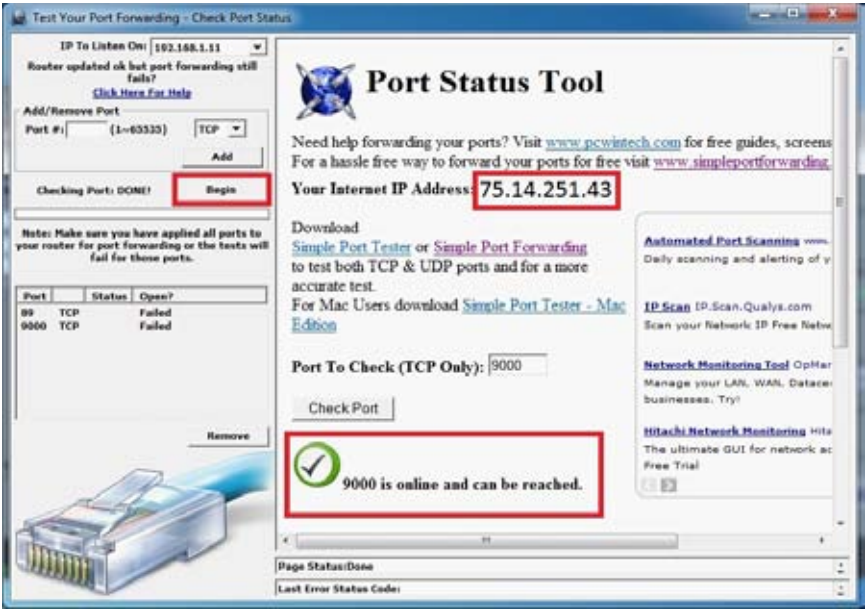
Once you receive the **DONE** message that the ports have been successfully forwarded, test if the ports are working by clicking on item number 7 in the **Check List** - **Test that the ports now work**.


Check List
(1) Update Router List
Do it now
(2) Select Your Router & Set Login Info
Do it now
Router not listed?
(3) Set your Local IP to a Static IP (Optional, not always needed)
Disabled
Help
Available in Pro version only
(4) Choose which ports you need to forward.
Do it now
(5) Update The Router
Do it now
Did updating the router fail? Check the help file first then ask for help in the forums!
View Help
Visit Forums
(6) Add ports to the Windows Firewall
Disabled
Available in Pro version only
(7) Test that the ports now work.
Do it now
Port test failed?
Click Here For Help
Do Not Show This At Start Up.
Close

PICTURE 7-34

Click on **Begin.**

If you receive a message stating that the port is online and can be reached, then you have set it up correctly.


Test Your Port Forwarding - Check Port Status
IP To Listen On: 192.168.1.11
Router updated ok but port forwarding still fails?
Click Here For Help
Add/Remove Port
Port #: (1-65535)
TCP
Add
Checking Port: DONE!
Begin
Note: Make sure you have applied all ports to your router for port forwarding or the tests will fail for these ports.
Port
Status
Open?
89 TCP Failed
9000 TCP Failed
Remove
Port Status Tool
Need help forwarding your ports? Visit www.pcwintech.com for free guides, screens
For a hassle free way to forward your ports for free visit www.simpleportforwarding
Your Internet IP Address: 75.14.251.43
Download
Simple Port Tester or Simple Port Forwarding
to test both TCP & UDP ports and for a more accurate test.
For Mac Users download Simple Port Tester - Mac Edition
Port To Check (TCP Only): 9000
Check Port
9000 is online and can be reached.
Automated Port Scanning
Daily scanning and alerting of
IP Scan IP.Scan.Qualys.com
Scan your Network IP Free
Network Monitoring Tool
Manage your LAN, WAN,
businesses. Try!
Hitachi Network Monitoring
The ultimate GUI for network
Free Trial
Page Status:Done
Last Error Status Code:

PICTURE 7-35

To connect to your DVR from the Internet, you will need to put the Internet IP address shown after "**Your Internet Address:**" message into the browser or access program window.

If you are forwarding any instead of port 80, then you need to put that port at the end of the address.

Example: if you use port 85, you will need to enter: http://75.14.251.43:**85**

PART 4: SETTING UP DMZ IN ROUTER 2

NOTE! You will only need to proceed with this section if you detected a second router in **Part 2**.

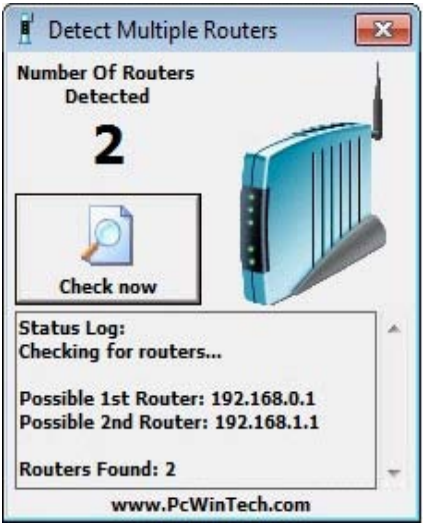
STEP 1. Login into Router 1 by putting the IP of Router 1 into the Internet Explorer browser, as in the example shown in **Picture 7-36** where the IP address of Router 1 is 192.168.0.1

STEP 2. Find the status page on the router settings that shows the WAN/ Internet IP address and write it down this WAN IP address.

STEP 3. Log into the Router 2 by putting the IP of Router 2 into the Internet Explorer browser, as in example shown in **Picture 7-36** where the IP address of Router 2 is 192.168.1.1

STEP 4. Find the **DMZ** page in the router settings.

STEP 5. Enter the WAN IP for Router 1 into the **DMZ** page and enable DMZ.



PICTURE 7-36

NOTE! If you do not have a **DMZ** setting in the router, check to see if there is a **Bridge** setting. If so, then use the **Bridge** setting instead of DMZ.

STEP 6. Save your changes.

You have forwarded the ports on the router to which the DVR is connected, to the IP address of the DVR, and set the primary router to pass the connection to this router.

7.3 DDNS (DYNAMIC DOMAIN NAME SERVICE)

You can access the DVR over the Internet using a static or dynamic IP address. However, your service provider can change this dynamic address from time to time. When it changes, you will have to return to ***www.MyIPAaddress.com***, again from a computer attached to the same router as the DVR to get the new public IP address.

There are two solutions to this problem. The first would be to obtain a static IP address from your ISP – which can be expensive. A second – *and free* – option is to use a dynamic domain name service (DDNS) to get a domain name that can be linked to your dynamic IP address. In addition to automatically keeping up with the changes in the address, you will now be able to enter a domain name rather than a string of digits when accessing the DVR in Internet Explorer.

While there are multiple free DDNS services available, we recommend using ***www.MyQ-See.com*** or ***www.DynDNS.com*** as the DVR has been already configured to accept account information from these two services.

NOTE! Before setting up DDNS, you must have previously set up Port Forwarding as described in the previous section.

Setting up DDNS

The following instructions are for setting up DDNS with MyQ-See, instructions for DynDNS are available on their website.

STEP 1. Using a computer that is connected to the same router as the DVR, use Internet Explorer to go to ***www.MyQ-See.com***

STEP 2. Fill out the required information to register and click the **Submit** button at the bottom of the screen.

STEP 3. The next page will ask you to create a domain name. Domain names must begin with a letter (a-z) or a number (0-9) and cannot contain a hyphen. Once you've decided upon a name, click on the "**Request Domain**" button. If it is available you will see a confirmation screen along with the IP address associated with it. Confirm that this matches the number obtained in **Network Settings**. Your domain name will look like this: ***http://example.myq-see.com***

STEP 4. Once you have obtained your domain name, you will need to configure the DVR for access using it.

PICTURE 7-37

PICTURE 7-38

To set up the DVR for access through a dynamic domain name:

STEP 1. Return to the **Network** window in the DVR.

STEP 2. Click on **DDN Settings** (**Purple box in Picture 7-39**) and then click on the **APPLY** option. This will open the DDNS Setup window.

PICTURE 7-39

STEP 3. In the **DDNS Setup Window**, Select the service – MyQ-See or DynDNS you are using and enter the account information you registered with the domain name service.

PICTURE 7-40

DDNS: Select the ON option from the drop down menu.

Service: Select myq-see from the drop down menu.

Host Name: Enter the account name you setup on the myq-see site.

Username: Enter the email address you used on the myq-see site.

Password: Enter the password you setup on the myq-see site.

7.4 ACCESSING YOUR DVR REMOTELY

Once you have configured the network settings on the DVR to match those on your router and forwarded the ports needed by the DVR to enable remote access over the Internet, you will be ready to remotely view your cameras using a webcam program based on an ActiveX control. For this to work, you will have to enable the ActiveX control options that are built into Internet Explorer. It is strongly suggested that you be running the latest version of Internet Explorer (currently IE8). The instructions below will describe the process using that version of the browser. Instructions for users with IE6 or 7 are available in the Resources library of our Technical Support page.

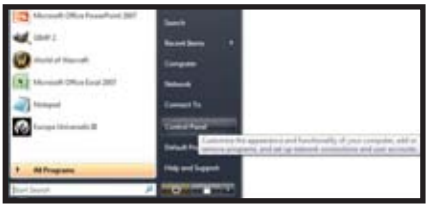
ACCESSING THE DVR USING INTERNET EXPLORER

User Account Control for Windows Vista and Windows 7

Some users of computers using Windows Vista or Windows 7 operating systems may receive an error message informing of a codec that is missing or not installed. This conflict can be resolved by turning off User Account Control (UAC).

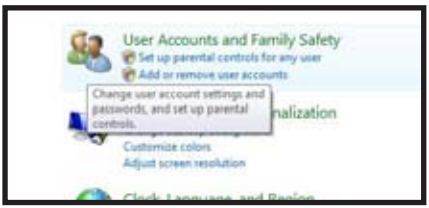
Windows Vista

STEP 1. Open the Control Panel (accessible by clicking on the Windows icon in the lower left of your screen.



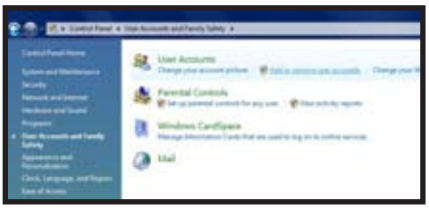
PICTURE 7-41

STEP 2. Select User **Accounts and Family Safety**.


User Accounts and Family Safety
Set up parental controls for any user
Add or remove user accounts
Change user account settings and passwords, and set up parental controls.
Customize colors
Adjust screen resolution

PICTURE 7-42

STEP 3. Select "**Add or Remove User Account**."



PICTURE 7-43

STEP 4. Select the desired user account.

PICTURE 7-44

STEP 5. Select **Turn User Account Control on or off**

PICTURE 7-45

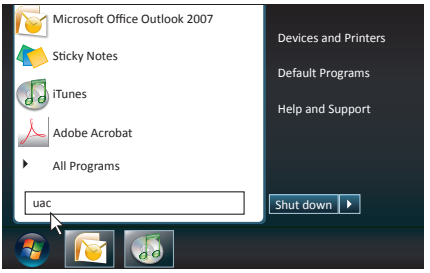
STEP 6. Uncheck the box next to "Use User Account Control (UAC) to help protect your computer."

STEP 7. You will then be asked to restart your computer for the change to take effect.

PICTURE 7-46

Windows 7

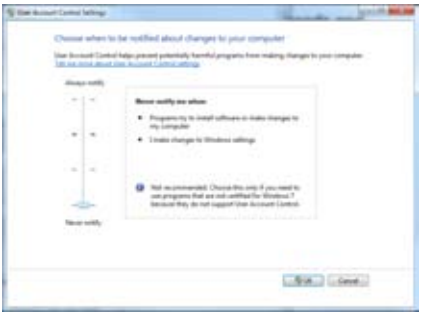
STEP 1. Open up the Start Menu (accessible by clicking on the Windows icon in the lower left of your screen.



PICTURE 7-47

STEP 2. Type "uac" into the search bar and hit **ENTER**. The User Account Control will open or you will be offered a link to click to open it.

STEP 3. Move slider to lowest setting and press **OK**.



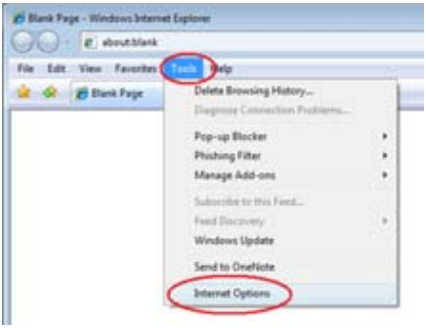
PICTURE 7-48

Setting Up ActiveX Control

STEP 1. Open Internet Explorer

STEP 2. Click on **Tools**

STEP 3. Select **Internet Options** in the pull-down menu



PICTURE 7-49

STEP 4. Click on the **Security** Tab

STEP 5. Select **Trusted** Sites

STEP 6. Click on the **Sites** button

Internet Options
General Security Privacy Content Connections Programs Advanced
Select a zone to view or change security settings.
Internet
Local intranet
Trusted sites
Restricted sites
Trusted sites
This zone contains websites that you trust not to damage your computer or your files.
Sites

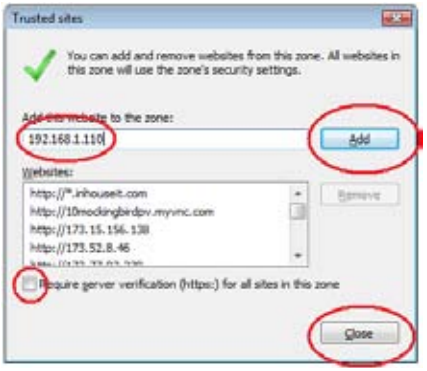
PICTURE 7-50

STEP 7. Uncheck the "**Require server verification (https:) for all sites in this zone**" button.

STEP 8. Type the DVR's IP address (obtained during **Network Setup**) or DDNS domain name into the "**Add this website to the zone:**" box.

STEP 9. Click the **Add** button

STEP 10. Close the window.

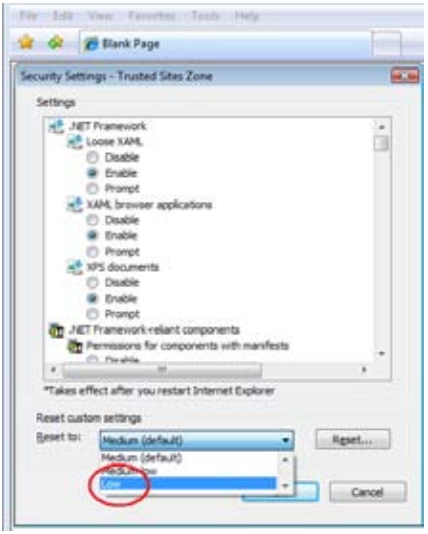


PICTURE 7-51

STEP 11. Click the **Custom level…** button.

PICTURE 7-52

STEP 12. Pull down the "**Reset to:**" menu button and select **Low**



PICTURE 7-53

STEP 13. Click the **Reset** button

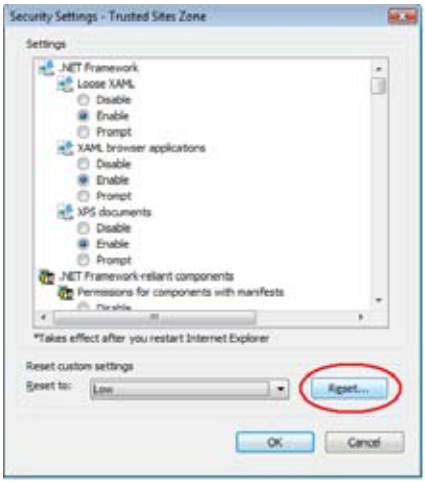
STEP 14. Click "**Yes**" when asked, "Are you sure you want to change the setting for this zone?"

STEP 15. Click **OK**

STEP 16. Click **Apply**

STEP 17. Click **OK**

STEP 18. Close Internet Explorer

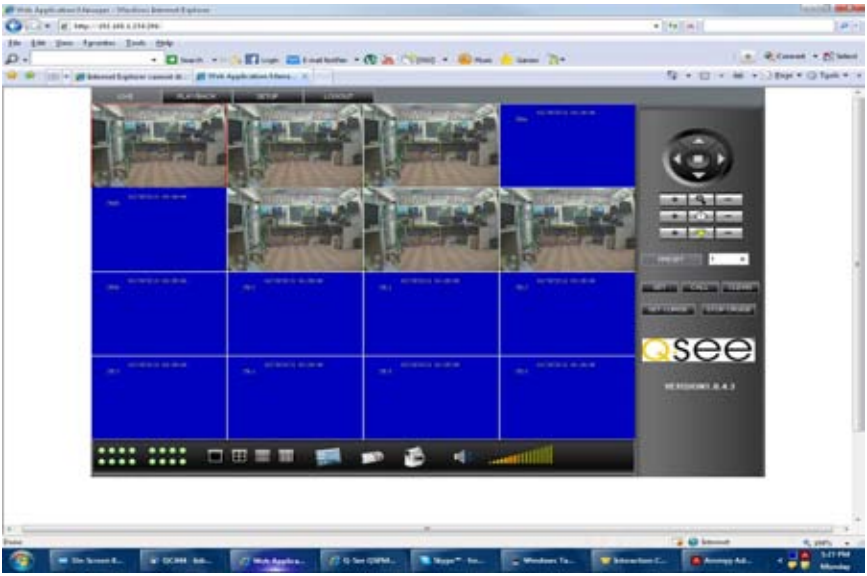


PICTURE 7-54

You are now ready to access the DVR using Internet Explorer.

7.5 REMOTE SURVEILLANCE SOFTWARE

The system features a built-in browser-based software that allows you to access your system remotely over your local area network (LAN) or over the Internet using Internet Explorer®.



PICTURE 7-55

The software will install the first time you access the DVR through Internet Explorer and will allow you to operate the network remotely. The DVR supports access over LAN and WAN, also supports IP and domain name access.

LOGGING IN REMOTELY

After you have installed the remote monitoring software, any time you acces the DVR from your computer you will have to sign onto the DVR through the Login window.

Select LAN or INTERNET from the drop-down menu and click LOGIN. The process will last for 1~2 minutes.

PICTURE 7-56

THE LIVE VIEW WINDOW

After logging in, the Remote Surveillance main screen will appear in your browser.

PICTURE 757

#	Item	Function
1	Modes	LIVE, PLAYBACK, SETUP and LOGOUT.
2	Main Screen	Main display screen for live viewing and playback.
3	Time Stamp	Time stamp appears on each channel.
4	Channel	Channel number appears in the top left corner.
5	PTZ Control	PTZ control for any connected PTZ cameras (not included).
6	Functions	Click the icons to show/hide channels, take screen captures, and record.
7	Display Modes	Click the icons to view channels in single-channel full-screen, quad, and split-screen configurations.
8	Volume/Mute	Select a channel (outlined in red) and then click the bars to increase/decrease volume; click the icon to mute/un-mute volume.*

*Audio-capable cameras or powered microphones (not included) required for audio listening and recording.

Live Viewing Controls

• Click LIVE at the top of the main screen.

• Click the display mode icons to view the main screen in single-channel, quad, or split-screen configurations. You can also double-click a channel at any time to view it in single-channel.

• Click to show or hide all the channel windows.

• Click to start/stop manual recording to your PC on ALL channels. For more details see **RECORDING**.

• Select a channel (outlined in red) and then click the audio bars to increase or decrease listening volume. Click the icon to mute/unmute.

NOTE! The Talk function is not enabled on this DVR.

RECORDING

You can record video directly to your PC using the remote surveillance software.

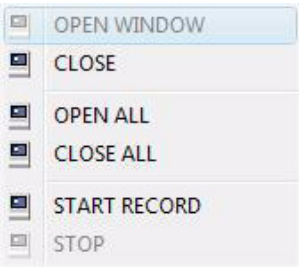
To record video to your PC:

From Live viewing, click to start/stop manual recording to your PC on ALL channels

NOTE! You will record video to your PC regardless of the recording mode on the system itself. By default, recorded files are saved in C:\DVR\[ip_address]\Record.

SHORTCUT MENU

Right-click any channel to open the Shortcut Menu.



PICTURE 7-58

PTZ CONTROL

You must have a PTZ camera (not included) connected to the system in order to use the PTZ controls.

Controlling a PTZ Camera

- Select the channel of the connected PTZ camera(s).
- Click the navigation arrows to pan and tilt the camera.
- Click **+** /**-** to control zoom, focus, and iris.
- Enter presets.
- Click **SETTING**, **HAND**, and **CLEAR** to further control presets.

PICTURE 7-59

SCREEN CAPTURES

Use the remote surveillance software to take a snapshot of the channels on the main display screen. Screen Captures can be useful for your own records, or may be needed by authorities in case of a security incident.

To take a screen capture:

STEP 1. In Live Viewing, select the channel you want to capture. The selected channel will be highlighted in a red frame.

STEP 2. Click .

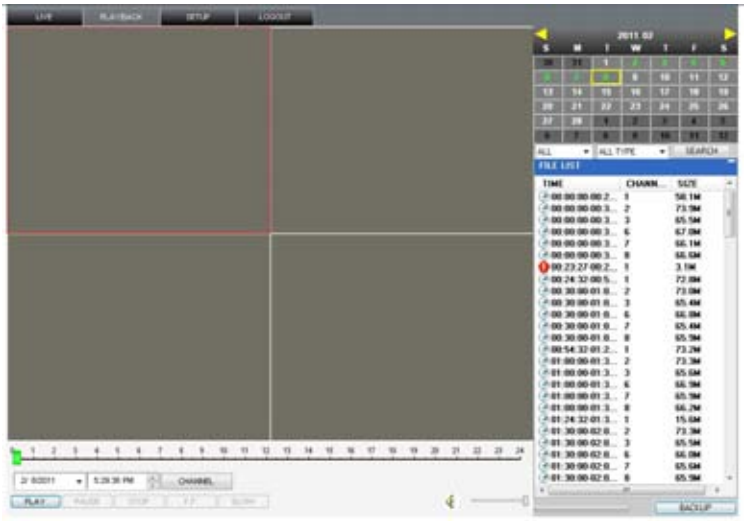
STEP 3. Click **OK** in the confirmation window.

Screen captures are saved as BMP files to the default save location (C:\DVR\...).

PLAYBACK

Use the **Playback** menu to search and playback recorded video on your system.

NOTE! When playing back video files online, you can only view a single camera at a time.



PICTURE 7-60

To use the replay menu:

STEP 1. Click PLAYBACK at the top of the main screen. The main screen will be grey.

STEP 2. Click REFRESH below the calendar to view the recorded files for the current month.

Normal recording is indicated by a clock icon; alarm recording (alarm, loss, and motion events) are indicated by an exclamation mark icon.

STEP 3. Double-click a file from the File List to playback the file in the main screen. The icon in the file list changes to "▶" .Control playback using the buttons at the bottom of the main screen.

PICTURE 7-61

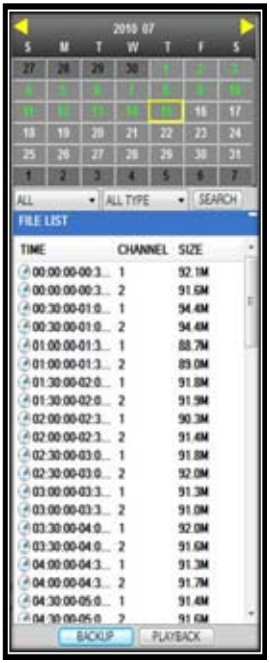
The blue bar above **BACKUP** indicates the download progress. The green marker above **PLAY** indicates playback progress. You can click and drag the playback marker to advance or rewind playback as needed.

Pause	Switch between pause/play
STOP	Stop play
F.F.	Fast play
SLOW	Slow play

SEARCH

Use the calendar and drop-down menus to search for recorded video on your system.

- Click **< >** to change the month on the calendar. Dates with recorded video data will appear in bold.
- Click the date. Recorded video files will populate the **File List**.
- In the Channel drop-down menu, select a specific channel or select **ALL CHANNEL** and then click **SEARCH**.
- In the Type drop-down menu, select **COMMON** (normal recording), **ALARM**, or **ALL TYPE** and then click **SEARCH**.
- Double-click the file from the File List to playback the file in the main screen.



PICTURE 7-62

REMOTE BACKUP

You can backup recorded video files from your system to your PC using the Replay menu in the remote surveillance software.

To backup files remotely:

STEP 1. Click **REPLAY** at the top of the main screen.

STEP 2. Select a date(s) on the calendar and click **REFRESH**.

STEP 3. Double-click a file from the **File List** to begin playback.

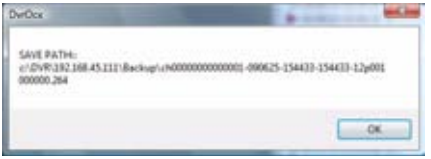
STEP 4. Click **BACKUP**. Backup begins to C:/DVR/[ip_address]/Backup

NOTE! If you play back a file, you must wait for the file to load before backing it up otherwise you may receive an error message.

PICTURE 7-63

When file backup is complete, click **OK** in the confirmation window. The confirmation window will show the save path of the backup file.

The files will be saved with the **.264** extension and can be viewed with the **Player** software included with your DVR. or available on our website.



PICTURE 7-64

REMOTE SETUP

Use the Setup tab to configure the settings of your system from a remote location. If the Main Menu is open on the system, you will not be able to make changes to the system from the remote location.

Opening Remote Setup

Click **SETUP** at the top of the main screen. The Remote Setup menu features the following tabbed options: **Record**, **Alarm**, **PTZ**, **Network**, **Setting**, **Host Info**

Click

to enter into setup interface, this interface include record, alarm, PTZ, network, setting and system information six menus.

PICTURE 7-65

Record

Click

to enter into setup interface; the parameter settings are the same as on the DVR.

Alarm Setting

Click "**ALARM**" to enter into setup interface; the parameter settings are the same as on the DVR.

PICTURE 7-66

PTZ

Click

to access setup interface; the parameter settings are the same as on the DVR.

PICTURE 7-67

Network

Click NETWORK to access setup interface; the parameter settings are the same as on the DVR.

PICTURE 7-68

Setting

Click SETTING to access setup interface; the parameter settings are the same as on the DVR.

PICTURE 7-69

BANDWIDTH: Set the bandwidth in kbps (128k, 192k, 256k, 384k, 512k, 1024k) that you want to allocate for traffic depending on the available internet bandwidth. This bandwidth does not include audio.

FILE SAVE PATH: The save path of captured picture and recording video. IE login password and DST settings you can set as DVR setting.

Maintenance

Click MAINTENANCE to access maintenance interface; you can reboot DVR or remotely upgrade firmware.

PICTURE 7-70

Host Info

Click HOST INFO to access system information interface (see Figure 4.3.14). This interface includes hard drive status, remaining recording time, firmware version and MAC Address. All the information is fixed, it cannot be changed.

PICTURE 7-71

7.6 MOBILE SURVEILLANCE

You can access your DVR from your cellular phone running Windows Mobile Pro (6.0 or later), Symbian (S60 3rd or later), Android, Blackberry (Curve 8900, Bold 9700, Tour 9630), or iPhone on 3G networks. The instructions on how to install and use the software for the different phone operating systems is on the CD included with the DVR. This CD also includes the software needed for Windows Mobile Pro, Symbian, Android, and Blackberry. To use with an iPhone you need to download the software from the iTunes app store. The installation and operating instructions for each type of phone are included on the CD included with the DVR.

NOTE! Before you can use mobile access you need to setup the network configuration on the DVR and forward ports 80, 100, and 9000 from the router the DVR is attached to, to the IP address of the DVR as described in **Section 7.2**.

The Mobile Setup window is found in the Advanced Menu.

PICTURE 7-72

To configure mobile notification settings:

STEP 1. Under **MOBILE NETWORK**, select 3G

STEP 2. Under **MOBILE PORT**, enter your mobile port number.

STEP 3. Click **APPLY**. Click **CLOSE** in the confirmation window.

PICTURE 7-73

HARD DRIVE INSTALLATION

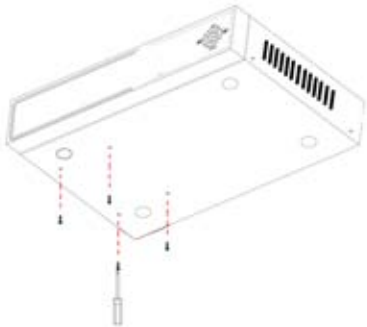
WARNING! ELECTRIC SHOCK RISK!

The DVR **MUST** be unplugged from all power sources as well as from the cameras before opening the case. Failure to do so can result in damage to the DVR or its components as well as injury or death.

It is strongly advised against opening the case when atmospheric conditions present the risk of static discharge which can damage electronic components. Please follow these steps to install the hard drive:

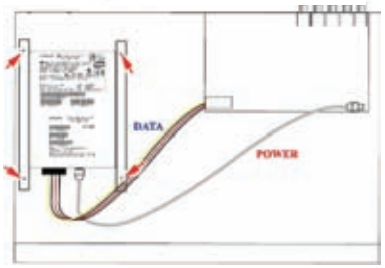
STEP 1. Open the cover of the DVR.

STEP 2. If replacing a hard drive, unscrew the four mounting screws on the underside of the DVR which secure the drive to the base of the DVR.



STEP 3. Connect HDD cables as shown below:

STEP 4. Attach HDD to base of the DVR with the screws provided.



STEP 5. After installing HDD into DVR close cover.

NOTE! The newly-installed hard drive will need to be formatted before it can record.

APPENDIX

PRODUCT SPECIFICATIONS

ITEM	DEVICE PARAMETER	SPECIFICATION
SYSTEM	LANGUAGE	ENGLISH/ CHINESE
	GUI	GRAPHIC MENU (OSD MENU)
	PASSWORD	ADMINISTRATOR PASSWORD, USER PASSWORD
VIDEO	VIDEO IN	8 CH (QS408) 16 CH (QS206) COMPOSITE VIDEO INPUT 1.0VP-P, IMPEDANCE75Ω, BNC
	VIDEO OUT	1 CH COMPOSITE VIDEO OUTPUT, BNC, VGA
	VGA OUTPUT	800x600, 1024x768, 1280x1024, 1366x768, 1440x900
	VIDEO DISPLAY	1/4/9/16 CHANNEL SWITCH, QUAD DISPLAY (16 Channel on QS206 only)
	VIDEO STANDARD	CIF PAL, 25F/S, CCIR625LINE, 50SCENE CIF NTSC, 30F/ S, CCIR525LINE, 60SCENE
AUDIO	AUDIO INPUT	2 CH (QS206) 8 CH (QS408) AUDIO INPUT, IMPEDANCE600Ω, RCA
	AUDIO OUTPUT	1 CH AUDIO OUTPUT, IMPEDANCE600Ω, RCA
	BASIC ELECTRICITY OUTPUT	LINEARITY ELECTRICITY
	RECORD STYLE	AUDIO VIDEO RECORDED SIMULTANEOUSLY
	AUDIO COMPRESSION	8khz 16bit ADPCM
PICTURE PROCESSING AND STORAGE	PICTURE COMPRESSION	H.264
	PICTURE RESOLUTION	QS206 CIF (352x240) QS408 CIF (352x240) D1 (702x480)
	STREAMING STYLE	ISO14496-10
	AUDIO STYLE	ADPCM
	VIDEO CODE RATE	CIF: 384~768 KBPS (NORMAL) CIF:512 KBPS (HIGH) CIF: 768 KBPS (HIGHEST)
	AUDIO CODE RATE	32KB/S
	DATA STORAGE	1 SATA HDD UP TO 2TB (OPTIONAL) QS206 1 SATA HDD UP TO 1TB (OPTIONAL) QS408

CONNECTOR	NETWORK INTERFACE	RJ45,10M/100M
ITEM	**DEVICE PARAMETER**	**SPECIFICATION**
ALARM	ALARM INPUT	4 ALARM INPUTS (QS206) 8 ALARM INPUTS (QS408)
ALARM I/O	VOLTAGE	0-2V, low voltage, 5-30V high voltage
CONNECTOR	ALARM OUTPUT	2 ALARM OUTPUTS (QS206) 1 ALARM OUTPUT (QS408)
	SERIAL INTERFACE	SUPPORT 1 RS232
	PTZ INTERFACE	SUPPORT 1 RS485 (PelcoD, PelcoP)
	NETWORK INTERFACE	RJ45, 10M/100M
	USB	Mouse USB 1.1
Backup USB 2.0		
SOFTWARE UPGRADE	SUPPORTS USB FIRMWARE UPGRADE	
OTHERS	VOLTAGE INPUT	AC:110~240V
	VOLTAGE OUTPUT	DC: 12V@5A
	POWER CONSUMPTION	6W WITHOUT HDD
	WORKING TEMPERATURE	50 TO 104°F (10 TO 40C)

BASIC OPERATIONAL SPECIFICATIONS

ITEM	PARAMETER	DESCRIPTION
VOLTAGE INPUT	12V	DC 12V 5AMP (QS206) DC 12V 3AMP (QS408)
VIDEO IMPEDANCE INPUT	75Ω	75Ω Each Channel
VIDEO OUTPUT	1V P-P	1V P-P CVBS Signal
SATA HDD	1 SATA	UP TO 2TB (QS206) UP TO 1TB (QS408) with mainstream capability
WORKING TEMPERATURE	50 TO 104°F (10 TO 40°C)	

FREQUENTLY ASKED QUESTIONS

If your problem is not listed below, please check our Resource Center at ***http://q-see.com/glossary/resource-library.php*** go to live chat at ***http://q-see.com*** or call our toll-free number, 877-998-3440 for more support.

Question 1: Why is the DVR not working after starting?

Answer:

- Check the power adaptor input
- Check the power on-off
- Check the main board of the DVR

Question 2: Why is the DVR rebooting automatically or stopping for several minutes after starting?

Answer:

- Instability or low input voltage
- Bad track on hard drive or the hard drive is bad
- Power supply is not producing enough power
- The front-end video signal is not stable
- High temperature, too much dust, bad DVR operating environment
- There is a problem with the connector on the main board
- The main board of the DVR is defective

Question 3: Why is there no video output on single channel, multi channel or all channels?

Answer:

- Please check the camera cable connection to verify it is well-connected
- Please check the cable connection video on the back panel of DVR
- Please connect the camera directly to a TV to see if you get picture
- Check the brightness of the picture and bring it back to its original default setting
- The main board of the DVR is defective

Question 4: DVR cannot record after startup and the interface is showing "H", why?

Answer:

- Make sure power adaptor is DC 19V
- Make sure hard drive is formatted
- Check the power and data connection cables of the hard drive
- The hard drive is defective
- The SATA port is not working

Question 5: What is the meaning of"R""M""I""H" showing on the screen?

Answer:

- "R"means the channel is recording
- "M" means the channel is on motion detection
- "I"means the channel is on alarm
- "H" means there is either no HDD. the HDD is bad or the HDD is full

Question 6: DVR is having problems with real-time images, such as bad image color or serious brightness distortion, why?

Answer:

- If PAL and NTSC is not correctly selected on the BNC output, the images will be in black and white
- DVR is not compatible with monitor
- The video transmission distance is too far
- The DVR color, brightness, etc. settings need to be adjusted

Question 7: Why don't I have audio when monitoring?

Answer:

- Check sound box or speaker functions. Also check for possible short circuit.
- Audio source may be connected to the video channel. You can click to full-screen to check.
- The main board of the DVR is defective

Question 8: Why don't I have audio when playing back?

Answer:

- Setting problem: open audio-video item
- Check the audio to see if it is closed in playback interface

Question 9: Why is my System time not correct?

Answer:

- Wrong setting or user did not click "Edit" to confirm
- Battery is not connected properly
- Battery is dead and needs to be changed

Question 10: Why does the "Stop recording" by the right mouse button not work?

Answer:

- The "Stop recording" by the right mouse button is only suitable for Manual recording. It can't stop recording when recording on a set schedule or on motion recording

Question 11: Why is Motion detection not working?

Answer:

- The settings in the motion detection area is not correct
- Sensitivity is too low

Question 12: Why is the USB device giving me a backup error?

Answer:

- The data exceeds the capacity of backup device
- The backup device is incompatible
- The backup device is damaged

Question 13: Why does the Remote Control not work?

Answer:

- The address of remote control is not correct
- The distance of remote control is too far or the angle is too wide
- Remote control batteries are low
- Remote control is damaged or the front panel of DVR is damaged

Question 14: Why can't I log in over the Internet?

Answer:

- Please check the network to see if it is connected. Check if LINK or 100M LED is displayed on the front panel; use ping xxx.xxx.xxx.xxx (DVR IP) to check if the Internet is linked properly
- Make sure you are running Windows XP, Vista, or Win7 operating system, and IE6.0-8.0 browser
- ActiveX control has been blocked. Please manually install ActiveX control again
- Please install DX8.1 and upgrade your video card driver

Question 15: Why is there is no picture or picture is not clear when you preview the recording or playback the recording via IE?

Answer:

- If you access DVR by IE, please choose "Wan" in "web environment"
- Please try "Close windows" by the right mouse button, and try "Open windows" again

Question 16: Why am I receiving a message indicating "other members are setting....." when accessing my DVR settings through Internet Explorer?

Answer:

- It probably means someone else is changing the settings of the DVR. Please check the DVR configuration interface or exit the DVR

Q-SEE PRODUCT WARRANTY

Q-See is proud to back all of our products with a conditional service warranty covering all hardware for 12 months from the date of purchase. Additionally, our products also come with a free exchange policy that covers all manufacturing defects for one month from the date of purchase. Permanent upgrading service is provided for the software.

Liability Exclusions:

Any product malfunction or abnormalities in operation or damage caused by the following reasons are not within the free service scope of our company:

1. Equipment damage caused by improper operation.
2. Improper equipment operation environment and conditions (e.g., improper power, extreme environmental temperatures, humidity, lightning and sudden surges of electricity).
3. Damage caused by acts of nature (e.g., earthquake, fire, etc).
4. Equipment damage caused by the maintenance of personnel not authorized by Q-See.
5. Product sold over 12 months ago.

In order to fulfill the terms of your warranty, you must complete the registration process after purchasing our product. To do this, simply fill out the User's Information Card on our website at www.Q-See.com

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QUESTIONS OR COMMENTS? CONTACT US

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